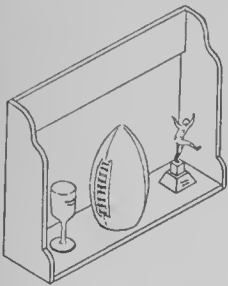
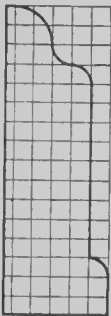


# Make A Trophy Shelf

by C. RAYMOND



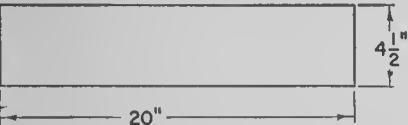
A WALL shelf provides an attractive display of hard-won trophies and other proud possessions. The shelf length can be varied depending upon the number of items to be displayed.



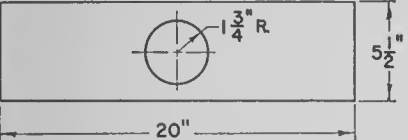
1" SQUARES

The sides and shelf are made of 1" by 6" lumber. Make a pattern for the sides and inscribe it on each panel. Cut out along the pattern lines with a coping saw. Make the top brace of 1" by 5" lumber.

TOP BRACE



SHELF



Assemble the project and hang on the wall with picture hooks, or fasten it to the wall studs.



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# THE Country GUIDE

Incorporating The Nor'West Farmer and Farm and Home

CANADA'S NATIONAL FARM MONTHLY

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Associate Editor: RICHARD COBB

Field Editors:

CLIFF FAULKNER, Western Canada  
DON BARON, Eastern Canada

Home and Family Section

Associate Editors:

ELVA FLETCHER  
GWEN LESLIE

## In This Issue



Farmer and ag. rep. prepare budget together.

CANADA'S UPSETS, financial and political, are discussed in editorials on page 6 and in a special report on page 7.

THERE'S A LOT OF TALK about farm budgeting these days, and it's not as tough as it may seem. We plan to have a number of articles on the subject, showing how farmers are handling their budgets. The first of them, "Plan for Profits," appears on page 14.

WHAT SORT OF SHAPE ARE YOU IN? Your figure responds to exercise and diet, but undercover fashions help too. You find some foundation facts on page 38.

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COVER: A happy scene on the Angel farm at Owen Sound, Ont., where city folk enjoy farm vacations. See story on page 11.—Don Baron photo.

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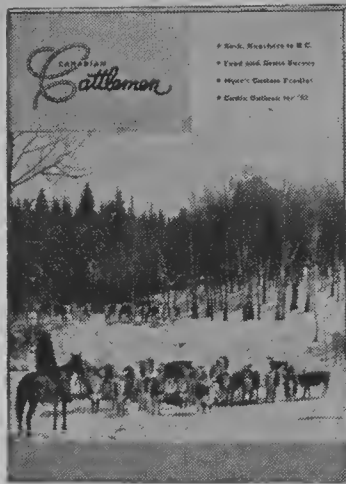
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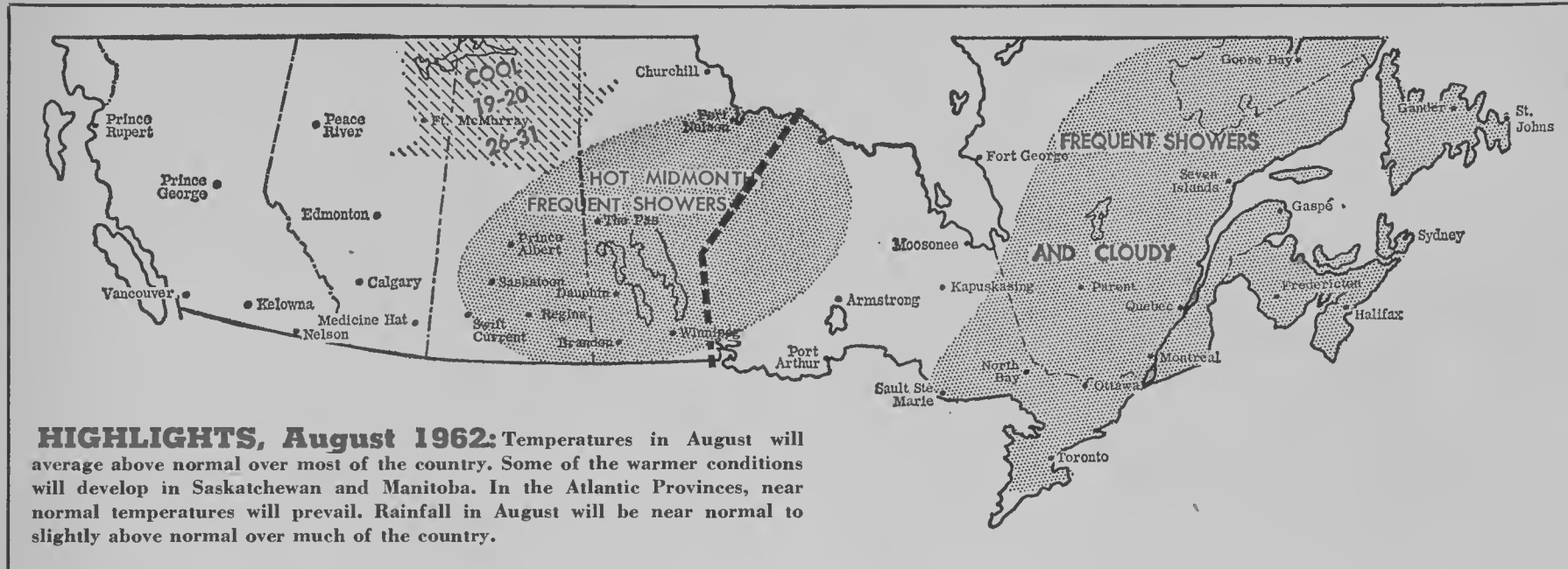
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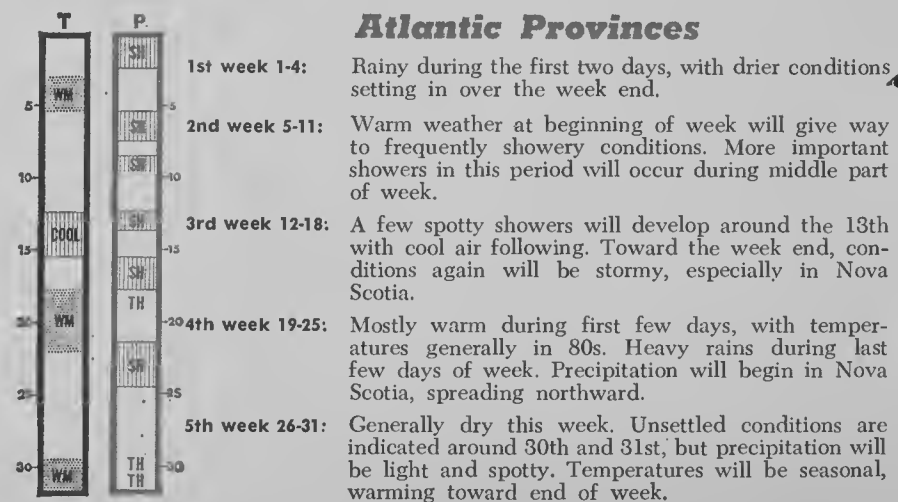
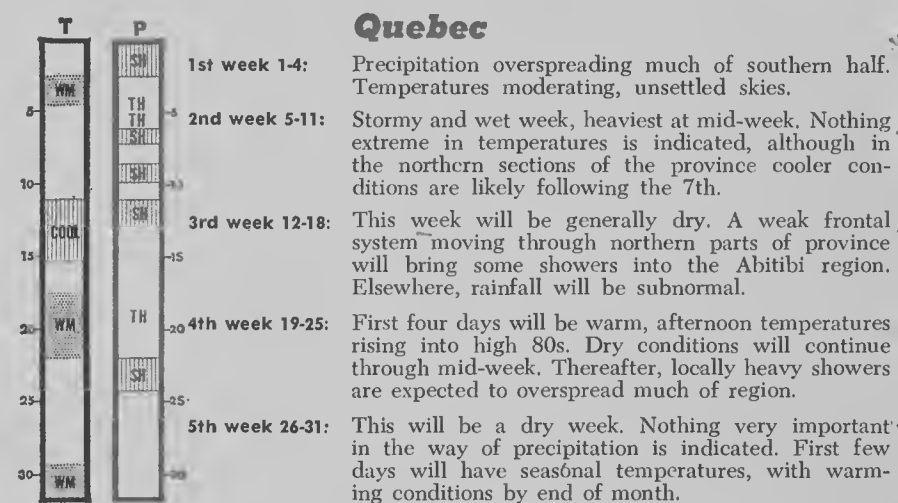
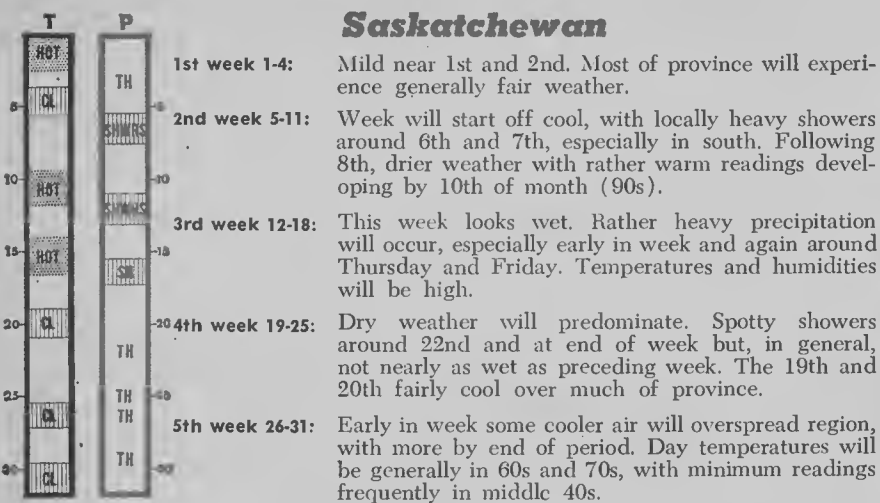
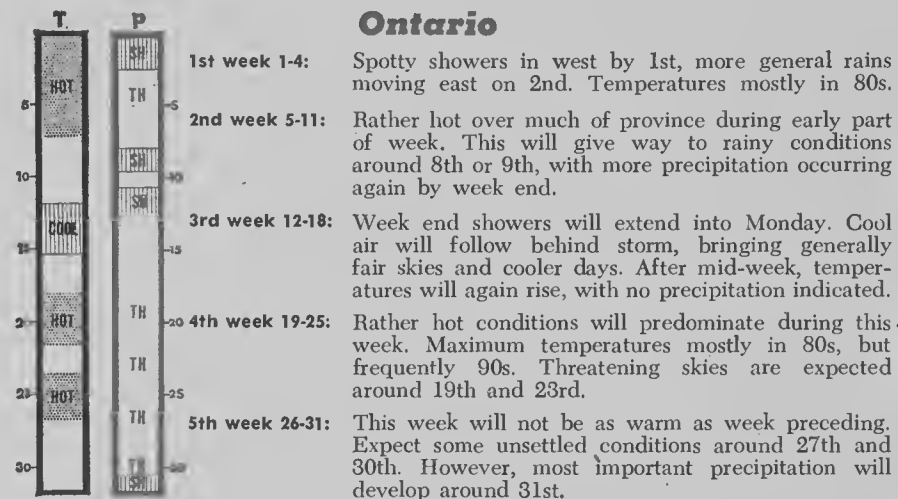
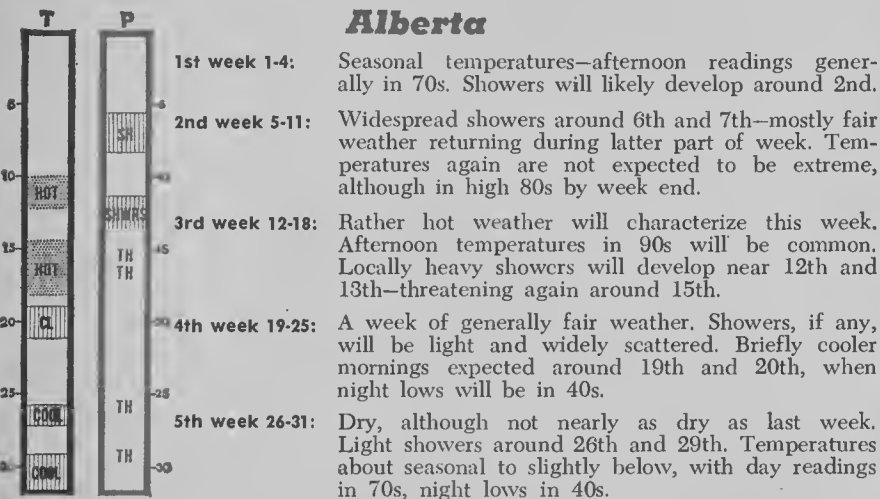


Prepared by DR. IRVING P. KRICK and Associates



**HIGHLIGHTS, August 1962:** Temperatures in August will average above normal over most of the country. Some of the warmer conditions will develop in Saskatchewan and Manitoba. In the Atlantic Provinces, near normal temperatures will prevail. Rainfall in August will be near normal to slightly above normal over much of the country.

(Allow a day or two either way in using this forecast. It should be 75 per cent right for your area, but not necessarily for your farm.—ed.)



# GUIDE POSTS

UP-TO-DATE  
FARM MARKET  
FORECASTS

**STRONG FEEDER CATTLE PRICES**--\$5 higher in mid-June than a year ago--should continue through summer. Fewer yearlings and better pasture conditions will keep marketings light, with feeder shipments to the U.S. negligible.

**FEED GRAIN PRODUCTION** prospects have improved and prices are trending downward. However, even under very favorable conditions, output will not be large enough to be a burden and prices will remain quite strong this fall.

**EDIBLE VEGETABLE OIL PRICES** will continue weak at least until fall, reflecting a big increase in output of U.S. soybean oil. This will keep rapeseed prices under pressure, which will be only partly relieved by the large reduction in seeded acreage.

**LARGER COW MARKETINGS** this summer will force prices seasonally lower, but most signs point toward a strong market with good cows averaging \$18 in Eastern markets and \$16.50 on Prairies. Strong export demand for processing beef assures a good outlet for canners and cutters.

**DURUM WHEAT PRICES** are pretty certain to decline this fall. With increased acreage and vastly improved yield prospects in both Canada and the United States, supplies will be ample, so keep only minimum quantities in store.

**PRICES FOR FED CATTLE** rose about \$2 this spring to highest sustained level since 1959. Accelerated shipments of slaughter cattle to the U.S. and dollar devaluation added strength. Immediate outlook appears strong with choice steers at Calgary in \$24-\$26 range and \$25-\$27 at Toronto. However, feeding profits will be slim due to expensive grain and feeders.

**STRONGER TURKEY MARKET** this fall seems assured by 20 per cent reduction in spring hatch. However, heavy freezer stocks and a smaller cutback in broiler turkey output will limit price gains this summer.

**FLAXSEED PRICES**, after a sharp surge upward, have settled back into trading range. Good early season crop prospects will stop run-away prices, but we should have a fairly strong market for all we produce this year.

**POULTRY MEAT PRICE PROSPECTS** for balance of 1962 appear better than a year ago. With beef and pork prices higher, consumer demand will probably clear the slightly smaller broiler production this summer at steady prices.

**POTATO PRICES** will show some improvement this summer due to the sharp decline in United States output. However, we can expect another winter of relatively unprofitable prices if yields of the big fall crop are normal.



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# Editorials

## A Confused Electorate

ON June 18 the Canadian electorate sent a minority government to Parliament. Such a state of affairs in our national political life is highly unsatisfactory at any time. Minority governments suggest political instability, indecision, and a precarious situation generally. A minority government is even worse at a time when there are so many critical, national and international issues requiring immediate and decisive action. In fact, the prospects for the future are deeply disturbing and call for sober reflection, not only by the political leaders and their party members, but by the electorate.

Here is an analysis of the more significant shifts in the recent voting.

The Progressive Conservative Party lost heavily at the polls. Its unprecedented majority of 208 members in the last Parliament was cut to a minority of 116: its popular vote dropped from more than 50 per cent of those who voted in 1958 to 37 per cent this time. It lost substantial strength in Central Canada, winning only 14 of 75 seats in Quebec, and 35 of 85 seats in Ontario. It was decisively defeated, mostly by the Liberal Party, but also by the New Democratic Party, in the large urban ridings of Montreal, Toronto, Vancouver and Winnipeg. In Canada's four largest cities the P.C.'s elected only 8 candidates to the Liberals' 35 and the N.D.P.'s 10.

In the Prairie Provinces the Progressive Conservatives retained overwhelming strength, winning 42 of the 48 ridings. They swept Prince Edward Island and held a commanding majority of the seats in Nova Scotia, but lost ground to the Liberals in New Brunswick and Newfoundland. In British Columbia the P.C.'s won only 6 of 22 ridings.

Obviously such results cannot be consoling to the Government. The Progressive Conservative Party campaigned largely on its record—a record that has been found wanting almost everywhere but in the Prairie Provinces. Here the Government's agricultural policies, and, in particular, the grain sales on credit to Red China, have been popular and account for the continued support.

THE Liberal Party gained at the polls. It increased its overall percentage of the vote from 33 to 37, and its standing in Parliament from 49 to 99 members. It showed surprising strength in both urban and rural Ontario, but failed to make the gains it anticipated in Quebec. In the Atlantic Provinces, the Liberals were about an equal match for the Conservatives, but made a bad showing in Western Canada, electing only 7 in the 72 ridings.

From where we sit, the Liberal Party fell short on several counts. In Quebec it badly misjudged the strength of the Social Credit forces. In the West, it exhibited a complete misunderstanding of the aspirations of the people. And, in general, Mr. Pearson does not seem to be developing the leadership appeal to the electorate that can tip the balance in a close election.

WHAT of the third and fourth parties? The New Democratic Party, while it commanded more of the popular vote than the Social Credit (14 as against 12 per cent), won fewer seats, because its support was more widely dispersed throughout the country. It elected 19 members to the Social Credit's 30.

Three conclusions for the N.D.P. seem apparent. It failed, as predicted in many quarters,

to win farm support and is now established as a labor party. It also failed to elect a member in Quebec, or to make much of a dent in the heart of the industrial East. Hence it does not appear to be changing the pattern of the way labor itself votes to any great extent. Finally, Mr. Douglas, the N.D.P. leader, for all his years as Premier of Saskatchewan, could not turn the Tory tide in that province, nor in the Regina riding in which he was defeated. In general, the social democrats fared rather badly.

The most exciting development in the election was the unexpected success of Social Credit in Quebec, under the leadership of Real Caouette—a man who was practically unknown to the people outside his native province but a few short weeks ago. The Social Credit Party elected 26 candidates in Quebec, 2 in Alberta and 2 in British Columbia to give it the balance of power in Parliament, providing the Grits and Tories disagree. It is said that the Social Credit support in Quebec was a vote against the old-line parties, particularly in the more isolated and backward areas of the province. How permanent this development is must remain open to conjecture. The point is that Prime Minister Diefenbaker must give some heed to Social Credit wishes if he expects to carry on with his minority government for very long. Mr. Diefenbaker hasn't made an outstanding success of getting on with the Social Credit governments in Alberta and British Columbia. It remains to be seen whether he'll have any more success with the Quebec wing of the

Party. His ace in the hole for a time is the fact that none of the parties are ready for another national election.

ARISING out of this brief analysis, as well as observations made during and since the campaign, these points should be made:

First, Parliament should be called at an early date to determine whether the minority government can, in fact, obtain a vote of confidence to carry on at least on a temporary basis. Prime Minister Diefenbaker and his colleagues cannot presume to pick up where they left off before the election. Nearly two-thirds of the electorate rejected their management of Federal affairs. The representatives of the people have the right to support or reject the measures to deal with the country's foreign exchange crisis and to decide what else is to be done, including the position Canada should assume at the forthcoming Commonwealth Prime Ministers' Conference.

Second, there should be a new election either this fall or next spring. The electorate should be given an opportunity to give one of the parties a clear-cut majority to govern. At a time of foreign exchange crisis, and with many important matters awaiting government action, Canada cannot afford to stand for long in the eyes of the world as a country experiencing political instability.

Finally, we trust all parties, and especially the Tories and Grits, have learned a lesson or two from their recent experiences. The electorate is sick and tired of hearing little more than partisan abuse and tearing the other fellow down on the hustings. The people want to hear the real issues of the day discussed and debated in depth. Nor is it good enough to run on a record, or to simply say "elect us and we will show you how to govern the country." This kind of campaigning was far too common in May and June. It left the voters confused and undecided about their franchise. Nobody can deny that the result is an unhappy and unfortunate one all round.

## Day of Reckoning

JUST a week after the election, Prime Minister Diefenbaker was forced to introduce an austerity program to deal with the nation's foreign exchange crisis. Because of the serious nature of this subject, we invited Prof. Clarence L. Barber to provide our readers with an expert, independent appraisal of what has given rise to this sorry state of affairs. His article appears on the facing page. We commend it to your attention.

Three points are worth special emphasis.

The Government's free-spending ways generally, and its mismanagement of the nation's financial affairs in particular, have caught up with it. Notwithstanding the Prime Minister's claim that the crisis arose in the few days immediately following the election, it is perfectly clear that the trouble started as long ago as 1957 and has been growing steadily more serious. The warnings were loud and clear, but the Government failed to respond effectively until the situation demanded severe measures.

The second point is that a distinction should be made between the foreign exchange crisis and the state of the general Canadian economy. According to Professor Barber "the sound Canadian economy of a few years ago is still basically sound today." He points out that in recent months output and employment have been rising significantly faster in Canada than in the United States. With the further measures that have been taken to meet the foreign exchange problem, there should be more confidence in the future of the Canadian economy both at home and abroad.

Finally, and this is a point Professor Barber did not touch on, there are penalties for the blunders that have been made and certain dangers in the steps that have been taken.

Canada's reputation and prestige abroad has suffered a hard blow. This cannot help but take some time to heal. Business people and governments of other countries are apt to move with caution where Canada is concerned for some time to come.

Canadians and Canadian business will experience rising costs, because of higher interest rates and the increased costs of imports. This will affect some people and industries more than others, and can create problems and hardship that could have been avoided.

The increases in tariffs have already caused a sharp reaction in some countries with which Canada has a large volume of trade, and which have come to depend on our market as an export outlet for their products. There is a real danger of tariff reprisals. It must be remembered that other nations are also subject to balance of payments difficulties. In our efforts to discourage imports, we could place some of our exports in jeopardy and hence compound our own foreign exchange problems.

The cuts in Government expenditure, necessary as they are, will undoubtedly affect the employment situation, and tend to offset the expected increases in employment in secondary industries.

While by no means an exhaustive list, these are some of the prices we must pay for the inept handling of the nation's finances.



# Canada's Crisis in Foreign Exchange

by CLARENCE L. BARBER

*Professor of Economics, University of Manitoba*

**W**ITHIN the past year Canadians have seen the value of their dollar fall from a premium over the United States dollar to a discount of about 9 per cent. And the Canadian government is having difficulty even holding it at that level. To prevent a further fall in the dollar's value, or, alternatively the loss of most of our reserves of United States dollars, Prime Minister Diefenbaker recently announced a number of emergency measures. They included temporary duties of from 5 to 15 per cent on a wide range of imports; an increase in the Bank of Canada's discount rate, foreshadowing a rise in interest rates; and, special loans from the International Monetary Fund, the United States and the United Kingdom.

What is happening to our economy? For more than 10 years our dollar stayed persistently at a premium. Now it plunges downward as though the roof had fallen in. Just a few years ago everywhere you went you heard the most glowing comments about the prospects of the Canadian economy. Now investors are starting to take their money out, and Canadians themselves have serious doubts about their future. Why this sudden change?

Basically, the sound Canadian economy of a few years ago is still sound today. What we suffer is the effects of a serious mismanagement of our affairs. Our trouble all started back about 1957. At that time we were enjoying a capital spending boom of exceptional vigor. The Trans-Canada gas pipeline was being built. The St. Lawrence Seaway was under construction. There was a great burst of expenditure on oil and gas exploration in the West. The uranium mines and smelters were being rushed to completion.

All this expenditure required more funds than Canadians could provide themselves. As a result, we borrowed heavily in the United States and in other countries. When we converted these funds

into Canadian dollars to spend in Canada, this raised the value of our dollar. The high value of our dollar and our heavy spending also produced a large deficit in our balance of payments.

All this was fine. But in late 1957 the boom began to subside. As capital spending in Canada began to decline—and this was almost inevitable because you can't run the economy at a fever pitch all the time—what we needed was a fall in the amount we borrowed from other countries, a decline in the value of our dollar and a reduction in the large excess of imports over exports. With a lower capital expenditure program we could finance more of it ourselves. We no longer needed to import more than we exported in amounts in excess of \$1 billion per year, and borrow the funds to pay for it.

But unfortunately none of this happened. The capital inflow, the borrowing from other countries, continued. This kept the value of our dollar at a very high level. In turn, this made it more difficult to sell our exports, and more attractive to buy imported goods instead of the products of our own manufacturers. What was needed was a deliberate effort by the government to get the value of our dollar down.

If the dollar had been reduced in value to 95 cents in early 1958, and kept there for the next 4 years, it would have added \$150 million to the income prairie farmers received from wheat alone in this period. Instead, the tight money policies of Mr. Coyne, and the conversion loan blunder of 1958, resulted in a record interest rate level in Canada. This, of course, encouraged further borrowing in the New York market where interest rates were lower. All this kept the Canadian dollar at a premium long after it ought to have fallen.

When Ottawa finally woke up to the nature of our difficulties, and took steps in June 1961 to push the value of our dollar down, I had hoped

that our difficulties would be over. For a lower value for the dollar could be expected to stimulate exports and divert spending in Canada away from imports and toward our own products. And indeed, this did provide a stimulus to the economy. In recent months output and employment has been rising significantly faster in Canada than in the United States.

Unfortunately some further blunders have occurred. Instead of letting the value of the dollar fall freely under market forces until it reached a level of 90 cents or lower, the government tried to keep it from falling. First, they tried to hold it at 97 cents. Then, they tried to keep it at 95 cents. But speculation against this rate became so heavy that in the midst of an election campaign the Prime Minister was forced to announce a return to a fixed rate at 92½ cents. And speculation has continued thus forcing the Government to introduce its emergency duties and other measures. Personally, I think none of these steps would have been needed if the rate had been left free to fall with moderate stabilizing action from our exchange fund.

In substantial degree the outflow of funds that is causing our trouble reflects the uneasiness of the foreign investor over the way our economy has been managed. He is disturbed by the size of our Government deficits. He has been upset by the way the Government tried to fire the Governor of the Bank of Canada, Mr. Coyne. This seemed to indicate that the Government would stop at nothing to keep on spending money.

Yet despite these investor fears, the basic prospects of the Canadian economy are still strong. The temporary import duties will help restore our trading position so that exports are once more equal to imports. This will mean we will no longer need to borrow from other countries every year to pay for an excess of imports. And these duties, plus the lower value of the dollar, should give a further stimulus to employment. Barring a serious recession in the United States, I predict that we shall soon see the lowest level of unemployment in Canada since 1957. V

## What's Happening

### FARM CREDIT LOANS REACH RECORD LEVEL

Loans approved by the Farm Credit Corporation during the 1961-62 fiscal year reached a record total of \$68.6 million, 13 per cent more than the amount approved in 1960-61.

The amount of loans approved for land purchases increased from 53.8 per cent of the total in 1960-61 to 57.8 per cent in 1961-62. Loans approved for paying off land-secured debts declined from 25.4 per cent of the total to 22 per cent.

Land purchases were the most important purposes for which loans were approved in the Prairie Provinces. They represented 63.6 per cent of total loan approvals in Manitoba, 74.8 per cent in Saskatchewan and 76.2 per cent in Alberta. Loans for improvements were relatively more important in the Atlantic Region. In New Brunswick, they were 24.6 per cent of the total and in

Nova Scotia 21.9 per cent. Loans for the purpose of paying off land-secured debt were relatively most important in Quebec and British Columbia, representing more than 40 per cent of all loans in these provinces.

Short-term and intermediate term loans granted in 1961 under the Farm Improvements Loans Act rose 6.2 per cent from the previous year to a record total of \$108.1 million. The average size of these loans for all Canada increased from \$1,497 in 1960 to \$1,532 in 1961. V

### C.S.G.A. MEETING HIGHLIGHTS

Over 300 people attended the 1962 annual meeting of the Canadian Seed Growers' Association which was held at the University of Manitoba last month.

The board of directors predicted that the total C.S.G.A. membership would be down 25 per cent this year

as compared to last. The board is deeply concerned over the financial position of the Association. In the last 2 years, a total deficit of approximately \$35,000 has occurred. With the anticipated drop in membership, the Association is expected to operate at a deficit during 1962-63. The annual meeting voted in favor of approaching the Federal Government for an additional grant. The board of directors explained that the additional costs of adminis-

tration, in large measure, were due to the C.S.G.A. taking over the administration of the Certified class of seed.

The meeting debated and voted in favor of proceeding with the implementation of a policy of allowing the sale of pedigreed seed in bulk for crop improvement purposes.

The meeting heard C. R. Phillips, director, Plant Products Division,

(Please turn to page 10)



Among those elected to Robertson Associate Membership in the C.S.G.A. in June were the following Saskatchewan farmers: (l. to r.) R. H. Clark, Kelvington; R. Y. Valens, Smiley; E. A. Vermette, Elrose; T. A. Brockman, Saskatoon.

[Univ. of Manitoba photo]

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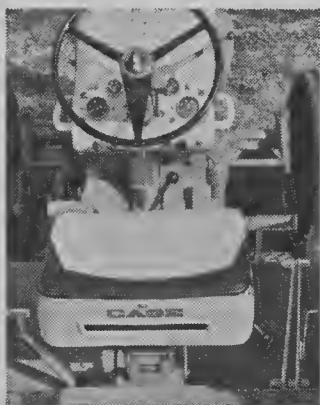
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Continued from page 7

Canada Department of Agriculture, talk about the remodeled Canadian Forage Seed Project. He said that the Project had not worked completely satisfactorily in the past and that changes were required. He said one of the major changes would be that under the re-organized Project, the seed trade would be able to obtain 50 per cent of the Foundation seed of newly-developed forage crop varieties. The other 50 per cent would be allocated to the provinces for distribution to interested parties. Under the old Canadian Forage

Seed Project, no special allocation of Foundation seed was made to members of the seed trade. In order to facilitate the operations of the Project and make quantities of Certified seed of forage crops available, the annual meeting voted in favor of deleting the Registered class in the forage seed multiplication program. V

#### LAMB PRICE SUPPORT SYSTEM CHANGED

Agriculture Minister Alvin Hamilton has announced that a deficiency

payment system of price support for lamb will go into effect July 1, replacing the offer to purchase program.

The new deficiency payment system will provide a national average price to producers of \$18.80 per cwt., basis live weight, for lambs of Good Quality or better. This is 92 per cent of the 10-year average base price, and is equivalent of \$20.45 per cwt., basis live weight Toronto.

It is anticipated that the new plan, which is reported to have producer support, will result in a greater proportion of Canadian lambs being

marketed as fresh lamb rather than frozen lamb.

The deficiency payment, if one becomes necessary, will apply on Choice and Good grade lambs in the 36 to 56 lb. carcass weight range. Producers are requested to retain all grading certificates received for lambs sold on or after July 1, as these certificates will be needed to substantiate claims for any deficiency payment.

Mr. Hamilton also announced that the Government has extended the quality premium payments to include Choice and Good grade lambs in the 52-56 lb. carcass weight range. V

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#### 50 MILLION PLEDGED FOR ARDA

Agriculture Minister Alvin Hamilton has announced that the Federal Government, subject to Parliament's approval, will make available \$50 million under the Agricultural Rehabilitation and Development Act between June 1, 1962 and March 31, 1965. In making the announcement he predicted that \$100 million may be spent in an integrated program of rural development over the next 3 years. The other \$50 million is expected to come from provincial and local contributions.

A draft general agreement has been sent to all provinces. It designates the projects that will qualify for federal assistance under ARDA, the share of Federal contributions, and the amount of the total Ottawa aid that will be allocated to the provinces. It is expected that a number of programs will be started this summer. V

#### CO-OPS DEVELOP FOREIGN AID PROGRAM

Action on the Co-operative Union of Canada's decision to develop a modest foreign aid program of a co-operative nature got underway last month. To start its crusade, CUC sent Rev. Norman MacKenzie, a United Church minister in Canada on furlough from his Far East mission, on a cross-Canada speaking tour.

With his help CUC hopes to persuade Canadian co-operators, individually and through their associations, to make grants to a continuing fund. This fund would be administered by the Co-operative Development Foundation through a program with three primary objectives: to train people from emerging nations in Canada in co-op principles; to send Canadian personnel abroad to similarly train people in those nations; and to make capital grants to help establish new co-ops or expand present co-ops where advisable.

From his experience in China, Nigeria and India, Rev. MacKenzie is convinced the next 20 years are decisive ones for the western world. His reasons: Non-white nations are in revolt against the white man. Numerically they'll account for four-fifths of world population by the year 2000. The western world needs to help them help themselves now if it wants to be recognized by them in the future, and it is in this field that co-operatives have a special role to play. V



# Farm Vacations for City Folk

*These farm families are opening their homes to people from the city who want to escape the crowds, relax, and enjoy home-cooked meals*

by **DON BARON**  
Field Editor



City vacationers head for the beach. The Avent family from Toronto and the Olson family from New York decide to explore one of the local resorts, with the Beirnes children to act as their guides.

**V**ISIT the farm of Jim and Eileen Beirnes near Preston, Ont., any day in July or August and you'll find an old-fashioned atmosphere that's missing on many a modern farm. At meal time, you'll find the kitchen crowded with ravenous people and a table creaking under a home-cooked meal — reminiscent of the days of threshing gangs. You'll find leisurely conversation too.

In the afternoon, you may find a car loaded with people on their way to the beach, or on a sightseeing tour. You may hear the shrieks of youngsters riding a pony. Or maybe you'll see nothing more exciting than a few folk enjoying a casual mid-afternoon coffee break, or reading quietly in the shade of a tree, or taking time to enjoy the splendor of a sunset in the country.

What is sure—you'll find an easy, comfortable

atmosphere. And, if you ask, you'll find that farm-wife Eileen, and other farm wives like her across Canada, are earning extra dollars by doing what they do well anyway—providing hospitality in their own homes. They are the ones who have joined Farm Vacations and Holidays Inc., and opened their homes to city folk wanting to try a farm holiday. For their trouble, they get plenty of work, meet many new and interesting people, and spend a variety-filled if somewhat hectic summer.

**J**IM and Eileen Beirnes have a 28-cow Holstein herd on their 150-acre Waterloo County farm. Four years ago, they heard of the Farm Vacations organization. Eileen always has enjoyed meeting people, cooking big meals, and serving them up to people with hearty appetites. She and Jim decided to open their home to city folk.

When this reporter visited them last summer, they were in the midst of their busiest week so far. Three families were there from three of the biggest cities around—New York, Montreal, and Toronto. The 6 visiting adults, and 3 children, and the Beirnes family including Janis and Cheryl, aged 15 and 13, and 7-year-old Timmy, filled the big old farm home to capacity. The kitchen table was extended to its full size. Eileen's vegetable garden, her fruit trees, the deep freeze, and the stove were in full use, providing the ingredients for the big meals.

"Without the girls to help out on a week like this," Eileen explained, "I couldn't do it, of course. Usually, we have only one or two families at a time."

The children play an important part in these vacations. They help with housework, cut the lawns, and keep the garden in shape. But they find more than just work. They often find children



Parents enjoy coffee on the lawn at Lucy Angel's farm, while the children have fun on the sulkies.



Three-year-old Peter Kelemen of Montreal finds pony ride at Beirnes farm a daring experience.

their own age among the visitors and this adds to the excitement of their summer.

Jim Beirnes is usually too busy farming during the day to chat with the guests, but at mealtime, and in the evenings, he does find time to enjoy his visitors.

**A**NOTHER couple who have joined Farm Vacations are Ernie and Lucy Angel who, with their two children, run Hill Top Farm near Owen Sound. Their guests, when this reporter called last July, were the Swearingens family from Pennsylvania. What a week it was for these Americans too. Thirteen-year-old Barbara had become a fast friend of 14-year-old Betty Lou Angel within minutes of their arrival. Together the two girls drove the black pony mare "Queenie" on the pint-sized sulky, or they hiked the fields, or did chores around the farm. Nine-year-old Allen Swearingens, and Jackie Birnie, an 8-year-old Torontonian spending the summer there, were soon driving alongside with the yearling pony "Smokie" hitched to the other sulky. Or the two boys were exploring the barns, making acquaintance with calves and pigs.

For Lucy Angel, it's been the fulfillment of a dream. She and her husband Ernie decided years ago that, while they couldn't expect a big income from their general farm program, they would not take the plunge into big borrowing to set up a specialized farm operation. But they also decided they would never give up the pleasures that go with farm living. Farm Vacations provided them with a way to share those pleasures with city folk and earn a few dollars while doing it. They have been winning friends every summer since, as vacationers come to their farm.

This reporter visited other members of the Farm Vacations movement too, including Albert and



A hand on Jim Beirnes' arm gives Peter confidence as he meets his first calf, face to face.



## FARM VACATIONS (Continued)



Allen Swearingens from Pennsylvania takes Smokie for a trot in the meadow. [Guide photo]

Phyllis Durst, Cherrydale Farm, near the scenic town of Benmiller in Huron County.

The Dursts have a family of four children—ranging from 2 to 8 years of age—and you'd wonder where Phyllis finds the energy to cook for guests. But like plenty of young farm families, she and Albert started farming by mortgaging themselves to the limit. They have 150 cultivated acres, and another 50 acres of rough land cut through by a sizeable stream. They are building up dairy and hog enterprises.

Phyllis takes an old-fashioned pleasure out of cooking and baking. Like Lucy Angel, she had often

thought: "Why not invite people to spend vacations with us?" Besides, she had plenty of projects in mind that demanded money, like furnishing their 100-year-old house, taking a regular vacation themselves, buying some new clothes, and putting money away for a college education for the kids. Her "farm vacationers" are helping to meet some of these purposes now.

There is plenty of work to providing hospitality for guests, but Mildred Ballard of Meaford, another vacation hostess, explained:

"We don't try to entertain them. It's their holiday, and we are busy. John has the farm to run, and I

have cooking and housekeeping to do. Most of the guests just seem to want good home-cooked food and an opportunity to rest.

"We sometimes take them to the beach if we have time, or we will take them for a picnic on Sundays. We will baby-sit for them too, if they want to go out to a country dance, or take in an evening performance at the Stratford Festival. Mostly, the people just want to get away from the city to relax.

"We taught one couple how to play euchre, and they wanted to play it every evening."

**T**HE idea of Farm Vacations is relatively new in Canada, and there are fewer than a dozen members. It is taking hold in the United States, where a couple of hundred farms, ranches, and rural inns are involved. These are all members of Farm Vacations and Holidays Inc., an organization that promotes the idea, and publishes a magazine listing the farm members. This magazine is distributed through cities to encourage city folk to try a farm vacation.

Eileen Beirnes is secretary of the Canadian group. Since many of their guests come from the U.S.A., the Canadians maintain membership in the American group. For a time at least, says Eileen, this association will be necessary to give members enough guests to make their program worth while.

How much do members make from their efforts? A lot depends on the individual. Guests who have visited

the farm once, and then return in succeeding years, can help keep the spare rooms occupied. Most members charge \$35 to \$40 per week for each adult visiting them, and \$15 to \$20 a week for children. There is a membership fee to be paid in the U.S. group and, as well, members must remit 5 per cent of their receipts to that organization.

Some day the Canadians might break away from the U.S. group, but the important thing right now, according to Eileen Beirnes, is to get the idea of farm vacations well established.

"We must be sure that the city folk who do choose to spend their holidays on the farm, take home pleasant memories, and glowing accounts to their friends," she says. "That's the best advertising we can do."

A "Farm Vacations in Canada" pamphlet can be obtained by writing: Mrs. James Beirnes, R.R. 2, Preston, Ont. v



# Guts is what you get in Moline's new M5 tractor!

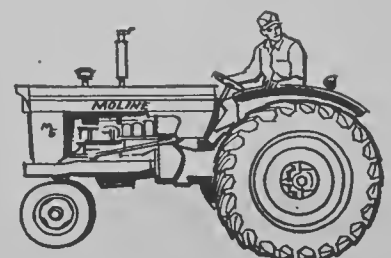


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# The HOW and WHY of Lightning Protection

*Millions of volts must have somewhere to go*

by J. B. K. VAN NORMAN and RICHARD COBB

**W**HAT is lightning? Benjamin Franklin's experiments with a kite showed that it is an electrical discharge. What happens is that electricity accumulates in clouds and in the earth. Some of the charges are positive and some negative. The nature of electricity is that positive charges form their own groups and negative charges band into separate groups. And when a positive and a negative group are in the same neighborhood, they have an irresistible urge to neutralize one another, breaking through the air's resistance with a violence that is visible as a flash of lightning.

If the discharge is between clouds, it is harmless so far as man is concerned, except for the rare cases when aircraft are damaged in midair. But if a charge in the earth is trying to reach an opposite charge in the sky, it may travel up through a building or a tree. It moves with tremendous force and, when it has to pass through such materials as wood, concrete, brick, tile, or glass, which are poor conductors, the result is friction which produces heat and can start a fire. If a building is of fireproof materials, the force of the charge will fight its way through them, and tear or dislodge or damage them in the process.

The answer is not to try to bottle up these discharges of electricity, which we call lightning, but to provide an easy escape for them that will produce little or no friction and heat. To make them harmless. This is lightning protection.

**T**HE familiar lightning rod is the accepted method of protection. When we speak of a building being "rodded," we may think of it as being equipped to carry electrical discharges harmlessly to the ground. But, in reality, a lightning rod system acts mainly as a deterrent to the lightning flash. The presence of the system on a building creates a path for accumulated electricity to escape from the ground adjacent to a building, or from the building itself. It passes into the atmosphere through the rod points at the top of the building. This is called "brush discharge," and it can be seen at the tips of the points in the form of blue flame or sparks.

A point is used in a lightning rod system because electricity passes through a point more

readily than through a flat surface or a ball. The brush discharge also creates a vacuum at the tip, which makes the point more receptive if lightning should strike in the immediate area.

The material used for lightning rod systems is either copper or aluminum. Copper is in greater use by far. Both are better conductors than other metals, but aluminum cable must be larger than copper cable to do an effective job. If a system combining copper and aluminum is used on a building, the two should be properly connected to eliminate a chemical action that is set up when they are in contact, resulting in deterioration of the aluminum.

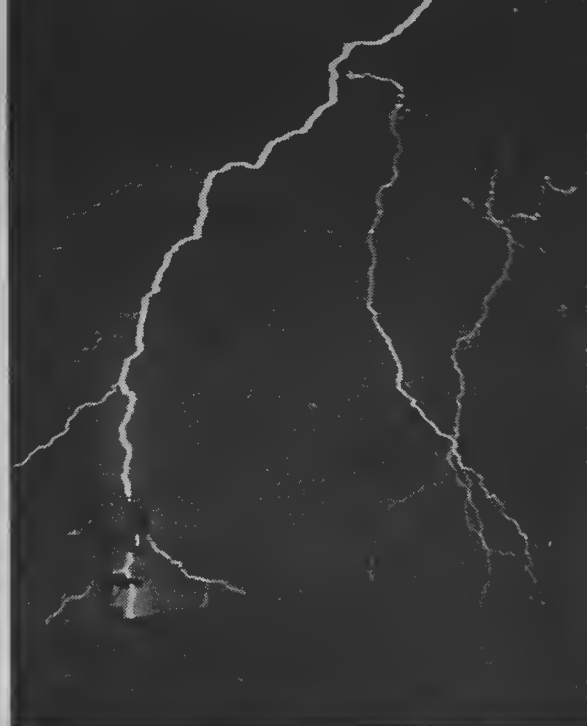
The grounding of the system is most important. This is done generally by extending the lightning rod cable about 10 feet into the earth. If a rock formation prevents this, a trench must be dug to a depth of 2 to 4 feet, running about 12 feet lengthwise from the building, and the cable is laid in it. If an even shallower trench is all that is possible, the cable should be branched out in several directions to assure as much surface as possible for grounding. Copper is the only material to use in grounding, as it is not subject to rust or corrosion like iron or aluminum.

The points of the system should be installed at all peaks or high places, such as chimneys, dormers, flagpoles and ventilators, and also spaced along ridges at 15 to 20 feet apart.

Cables should run without a break between at least two grounds. Some buildings need more than two. All connections and splices must be in good electrical contact, preferably with malleable clamp-type splicers rather than wrapped splices. Metal roofs or metal-clad buildings ought to be rodded in the same manner as wooden structures.

Television aerials are another factor. They should be grounded adequately and have an approved lightning arrester at the lead-in wire to the TV set.

**T**HERE was a time when, through lack of knowledge, and hence lack of regulation, the effectiveness of lightning protection systems was doubtful. But nowadays there is no excuse for anyone who sells and installs poor systems. Ontario was the first province to pass legislation that



For every tick of the clock, 100 gigantic lightning bolts strike earth in the lightning season.

required those in the business to be licensed and bonded. Minimum specifications for materials and rigid requirements for installations were established, and control was exercised through inspections. Other provinces followed this pattern, but not all, and unfortunately it happens that people who have difficulty in procuring a license in a controlled province have found it convenient to sell and install systems in provinces where there is no regulation. These people are often hard to find afterwards, if the purchaser discovers that he has paid for a substandard job.

Any farmer, if at all doubtful of the reliability of an individual or firm offering lightning rods, can find the answer easily by asking his local insurance agent or the fire commissioner.

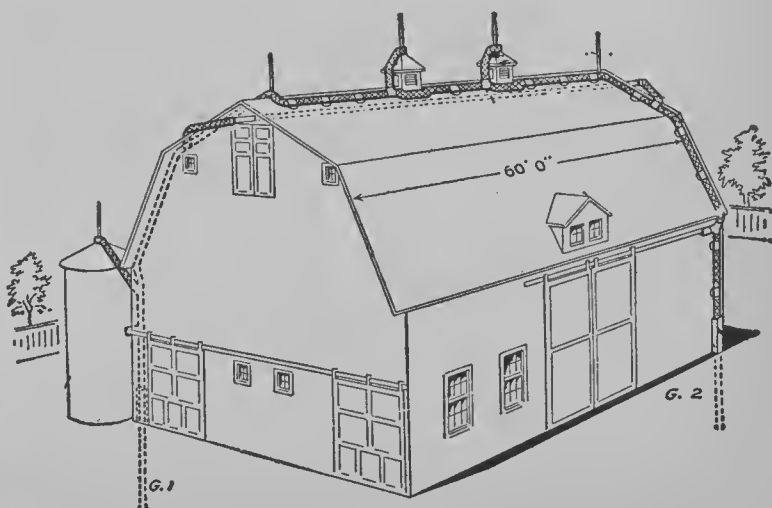
It is a fact that buildings in rural areas are more susceptible to lightning damage than buildings in thickly populated areas. No statistics have been compiled in Canada, but figures from the United States show that lightning is the largest single source of fire losses in farm buildings. Lightning last year caused a total loss of more than \$61 million in damage and destruction on American farms. Losses are significant enough in Canada to have led insurance companies to grant premium reductions on all farm buildings, schools, and churches equipped with proper systems of lightning rods.

But, even without statistics, many farmers are well aware of the damage to life and property that can be wrought by lightning. Not so many may be aware of the claim that lightning rods, properly installed, have an efficiency of 98.7 to 99.9 per cent.

Lightning is something that must be lived with. It does have a beneficial effect in the conversion of elements in the atmosphere into nitrogen, which falls on farm lands and aids fertility. Its harmful effect, the devastation that accompanies the lightning flash, can be controlled. V



Here's what lightning can do to a barn without a proper protection system. The diagram at right shows a typical installation for the barns and silos.



# Plan for profits



Graham and Scott discuss larger hog setup.



Working out budget before making a change.

*Mistakes don't hurt if they're caught in the planning stage. Budgeting helps to sift out right from wrong decisions*

by **DON BARON**

Field Editor

ACCORDING to Darrel Plaunt, it's one thing to keep the farm account book up-to-date, but something else altogether to make use of those records.

"Account books are fine in themselves, but they only pinpoint the *problems* in the farm business. They might point up a farm's low crop yield index, low milk production, or poor labor efficiency, but this information is of no value until steps are taken to correct the weaknesses."

And that's just where budgeting has become one of the newest farm management techniques.

Plaunt, who is a farm management specialist with the Department of Economics, O.A.C. says, "Budgeting is a way of choosing; of estimating the outcome of a proposed change; of making your mistakes in the living room, where they won't cost anything, rather than in the barn."

At first glance, the idea sounds a little involved. But it isn't really. The budgeting technique can be used, as Brant County, Ont., farmer Earl Scott uses it, in making day-to-day decisions.

## FEED GRINDER-MIXER

Scott has expanded his swine enterprise, until now he feeds 600 hogs a year. He has a dairy herd too. He has been buying his grain in bulk and paying a custom operator to visit the farm each week to grind and mix his rations. But as he used more feed, his costs went up until he was paying \$30 a week for this service. It loomed as a big expense, and this spring he asked himself, "Would it pay me to buy my own grinder-mixer?"

Scott first priced a farm-sized grinder-mixer, then called in his agricultural representative, Don Graham, for help in making up a budget. He wanted to find out, as closely as possible, what savings would result from such a purchase. They used a form available from O.A.C., as a guide:

### Added Annual Costs

Purchase price of machine is \$2,000. Annual depreciation over 10 years	\$200
Interest (½ purchase price x 5%)	50
Maintenance and repairs	65
Insurance	15
Operating costs (300 hr., 3 gal. gas per hr., at 25¢ per gal.)	225
Labor (approx. 6 hr. per week, at \$1 per hr.)	300
Extra costs (ones that can't be foreseen)	45
<b>TOTAL ANNUAL COST OF MACHINE</b>	<b>\$900</b>
<b>SAVINGS MADE BY PURCHASING MACHINE:</b>	
ELIMINATE HIRING OF FEED MIXER	\$1,400
<b>NET GAIN BY PURCHASING MIXER</b>	<b>\$500</b>

The budget showed that Scott could save money by purchasing a mixer—about \$500 a year, or \$2.50 per ton for 200 tons of feed. But it also drew his attention to other facts:

- ✓ First, there are a lot of expenses to running a mixer that don't appear at first glance.
- ✓ Second, much of the money he had been paying to the custom operator would still be spent in the form of depreciation, gasoline, etc.
- ✓ Third, he would have to provide labor to run it. Six hours a week would be required. This, however, suited Scott, because he planned to take on a full-time hired man.

Ag. rep. Graham calls budgets one of the best developments to come along in some time. "For the past couple of years we have been trying in our local farm management association to devise a reliable way to predict, on paper, how various changes in a management program would work out. This was a start, but we were uncertain about our methods. In recent months, things have changed. Specialists at the O.A.C. have begun to take budgeting seriously. They are drawing up charts or outlines, which we can use."

## FORAGE HARVESTER

Graham, who is secretary of the farm management association in his district, has helped members work out plenty of budgets in recent months. Here is one drawn up by a farmer who wanted to know the cost of owning a forage harvester:

### Annual Fixed Costs

Depreciation (purchase price \$2,000 and life of 10 years)	\$200
Interest (5% on ½ purchase price)	50
Housing, taxes and insurance (.8% of cost)	16
<b>TOTAL</b>	<b>\$266</b>

### Annual Operating Costs

Power (5 days at 10 hr. per day) per year	\$ 30
Operator, per year	30
Repairs (3% of original cost)	60
Grease and oil	5
<b>TOTAL OR \$25 PER DAY</b>	<b>\$125</b>
<b>ANNUAL FIXED &amp; OPERATING COSTS</b>	<b>\$391</b>
Average costs per unit produced (30 tons per day, for 5 days—150 tons)	\$2.60

This indicated the cost of operating a forage harvester under a certain set of conditions. So each farmer must draw up his own budget for any machine he considers buying.

## HOG ENTERPRISE

A budget like this, for a single machine, is about the simplest kind to work out. Budgets can get a little more involved, when they concern a whole farm enterprise. Here is one that Plaunt drew up for a cash-crop farmer who was selling his grain right from the combine, but decided he required more income.

Three possibilities occurred to this farmer as he planned his changes. He could feed out western lambs; put in a flock of hens; or feed out some hogs. On further thought, he realized that he didn't have enough hay to carry the number of lambs which would be required to make the best use of his grain. He discarded the idea of hens because conversion of the old barn to a henhouse would be too expensive. This left hogs.

A budget was drawn up. In this particular case, Plaunt says, the farmer had enough space in the old barn to handle 100 to 150 hogs. The hogs wouldn't interfere with any other enterprise.

Extra costs per hog were estimated as follows:

Price of weaner	\$12.00
Interest on money borrowed to buy weaner \$12 at 6% for 4 months	.24
600 lb. grain valued at whatever net price could be obtained for it at the farm, say 2¼¢ per lb.	13.50
Interest on money tied up in grain \$13.50 at 6% for 4 months	.27
600 lb. protein supplement	5.50
Veterinarian and medical expenses	.20
Marketing costs 40¢ plus trucking, or 3% of selling price	.78
Other miscellaneous expenses	.26
<b>TOTAL EXTRA COSTS PER HOG</b>	<b>\$32.75</b>

He estimated extra returns per hog as follows:

150 lb. times an estimated average price of 26¢ for average grade of hog produced	\$39.00
Less mortality of 3%, or 3% of the price of the weaner and the amount of grain and concentrate consumed at time of death, or about 75¢ per hog marketed	.75
<b>TOTAL EXTRA RETURNS PER HOG</b>	<b>\$38.25</b>

Therefore, his estimate of the additional profit was  $\$38.25 - \$32.75 = \$5.50$  per hog.

The limiting factor in the enterprise was the amount of grain available. He had only 30 tons. That meant he could finish 100 hogs. Profits, then, would be \$550.

If his estimates were reliable, the farmer could make this extra \$550 profit over and above the \$1,350 (30 tons at \$45 per ton) he could receive from the sale of his grain for cash. It looked like a way to sell grain for \$63 a ton, instead of \$45.

PLAUNT classifies budgets into two general types: complete and partial. *Complete budgeting* means estimating the total costs and the total returns, and hence the total profits to be expected from a given way of running the business. *Partial budgeting* is simpler. It means estimating the change in costs, and the change in returns, and hence the change in profits, to be expected from any proposed change in the business. It could well be used by every farmer in his day-to-day planning.

"For instance," says Plaunt, "if a farmer's account books show him that his milk production is too low, one or several steps might be taken to increase it. He might cull and replace some cows; he might feed his cows better; he might expand the herd. The real problem is to find out which one of these, or which combination, will pay best." In effect, these are the three key steps in budgeting:

- List all the extra costs of making the change.
- List all the extra returns that you expect from it.
- Subtract the extra costs from the extra returns, to estimate the profitability of this change.

With a little practice, some farmers are making it their most useful tool in planning for profits. ✓



# Barns without Walls

*They survive 200 inches of  
snow in Columbia Valley*

**B**ACK in the Columbia Valley around Revelstoke, B.C., you will see a barn that is all roof. The design is peculiar to this region of heavy snowfall and it illustrates the ingenuity of farmers in adapting themselves to local conditions. An annual snowfall of 200 inches or more poses many problems, not the least of which is to keep buildings from collapsing under the accumulating weight.

Designed to shed snow, not to support it, these steeple barns are framed with large poles set in the ground, making each structure simply a roof with a very steep pitch. The dense forest of the area furnishes long, straight poles and the cedar required for making shakes.

C. Lanzo's barn, a few miles south of Revelstoke, has survived many winters, more than one of which brought 20 feet of snow to the valley. It was built by his father 55 years ago. Max Koshman, on the Arrowhead road, built his barn himself. He managed to achieve the maximum pitch—anything steeper would leave no room for hay in the loft. In winter, the snow keeps sliding off it until it is piled higher than the loft level.

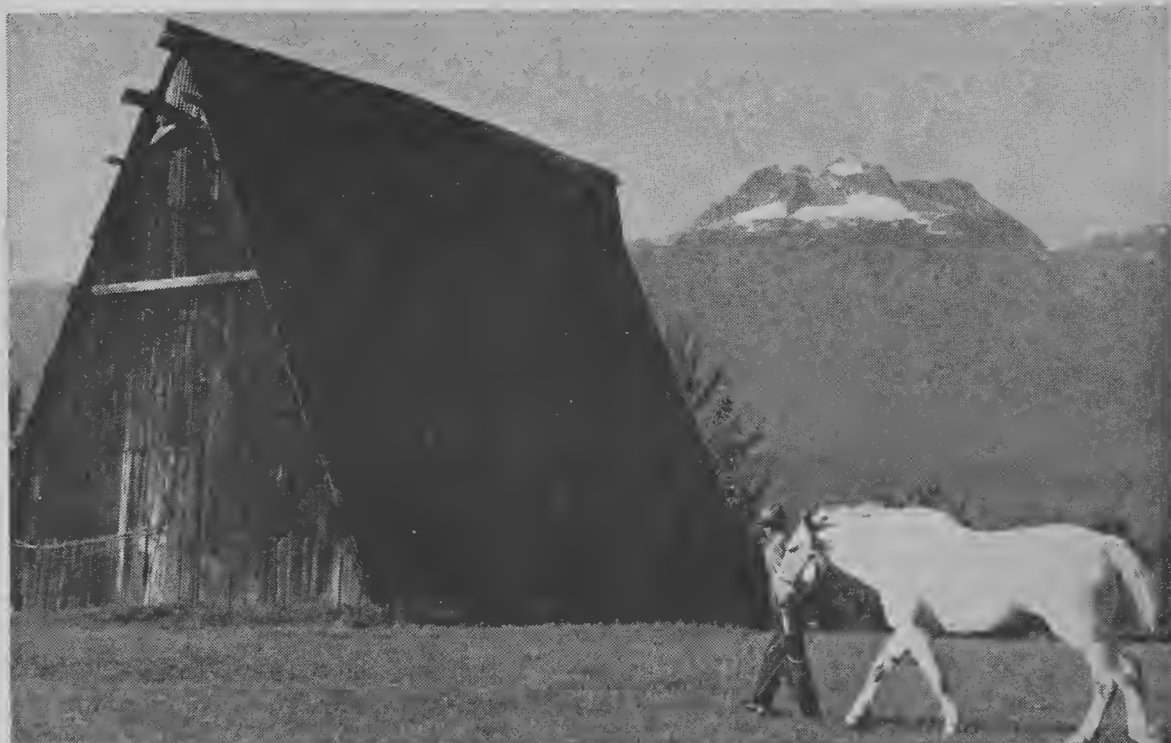
Further south, J. Ozero can point out damage sustained by his large barn during a winter of exceptional snowfall. Accumulating snow sliding from the roof rose to such a height that the pressure sprung several of the big rafter poles which are now strengthened by props and splints.

The largest barn of this type is at Greely in the Illecillewaet Valley. It stands on the farm of G. Loefflar. It is 40 feet high and floored throughout, and can hold a large quantity of hay, as well as farm implements.

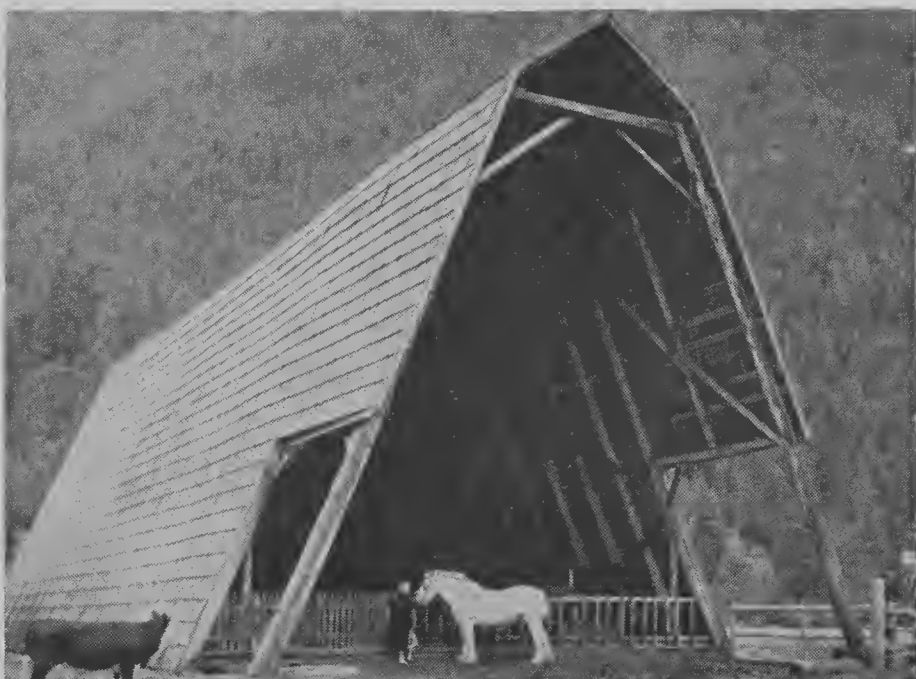
**Photo-Story**  
by **DONOVAN CLEMSON**



Koshman's barn is narrowest in Columbia Valley. Summer and winter pictures show the extent of snowfall.



C. Lanzo's steeple barn has weathered 55 winters. Mount Begbie towers to 9,000 feet in the background.



The largest of its type, the barn of G. Loefflar measures 40 feet to its peak.



J. Ozero strengthened barn with props and splints after huge snowfall.

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*Gold leaf Maple leaf*

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In Brantford's Gold Leaf Binder Twine—as in their famous baler twine—you get guaranteed economy with full measure . . . free-running, uniform quality . . . plus exclusive Formula-X anti rot-and-rodent protection.



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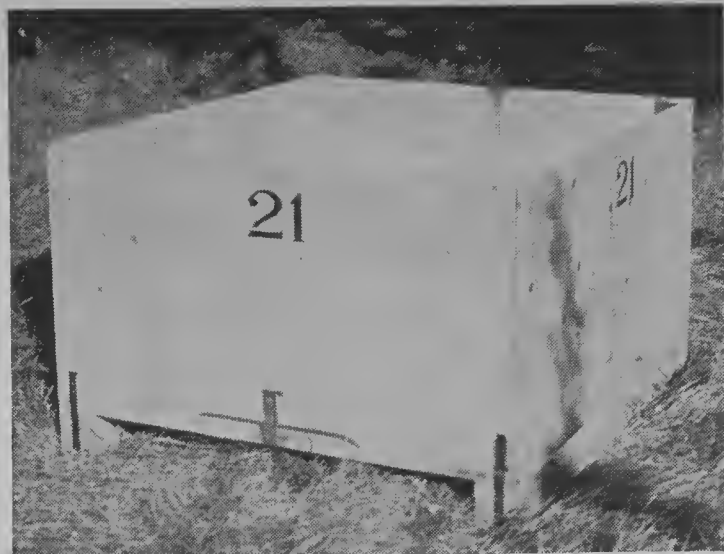
Automatic full size model of a Luger Automatic pistol—contains over 15 moving parts. Loads 8 complete rounds which snap into the hard butt simulating a Luger. Fires 8 bullet shaped pellets. Has automatic slide action. Made of heavy, high-impact styrene with amazing attention to detail. **MOST AUTHENTIC MODEL GUN WE'VE EVER SEEN.**

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# What's Happening in ORCHARD AUTOMATION?

by **CLIFF FAULKNER**

Field Editor



This bulk bin has corner posts with reinforcing metal strips.

*Small growers can save a lot of labor with a few simple items of equipment*

SINCE bulk bins were first introduced to B.C. orchards in 1957, they've gained rapidly in favor. A large part of the B.C. crop is disposed of through a single producer-owned agency, and growers agreed on a standard-sized bin of the following dimensions: overall length 48", overall width 43" and height (including outside pallets) 29" to 30". Inside depth of the box is 24". When full, each weighs from 900 to 1,100 lb. In some places a shallower bin is being used for peaches.

The pallets or stands attached to each bottom are made so as to allow four-way entry of the fork-lift machine used to transport them. This construction also enables air to move freely around bins when they're stacked. Ventilation inside the boxes is provided by one-inch slits or openings (larger ones might damage fruit) along the bottom edge of each side.

The first bins made had 5/8" spruce plywood sides and bottoms. However, it was found that bottoms sagged when bins were filled unless 3/4" plywood was used. Half-inch plywood has proved quite satisfactory for the sides. Corner posts are generally made of 4" by 4" dressed pine, cut diagonally, and all joints fastened with galvanized nails and glue.

When exposed to the weather, untreated plywood swells and peels. This would make a bin's interior surfaces rough enough to damage fruit. What is needed here is an inexpensive, water-repellent, non-toxic wood preservative—one which won't impart off-odors to the fruit. Wood sealers

dissolved in a petroleum solvent have been found very effective for this job.

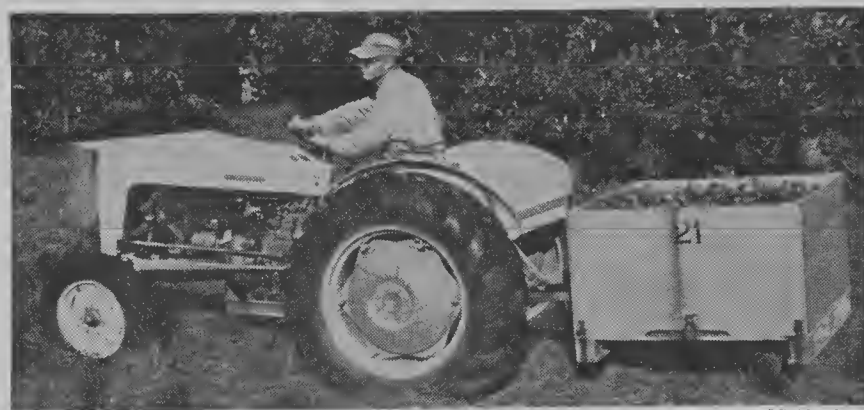
MOST growers find that a simple rear-lift mounted on the three-point hitch of a tractor is the best bin-handling equipment. This can be used to distribute empty bins, move partly-filled ones, or carry full bins to a loading area. Sometimes it can even be used to load full bins on the deck of a truck or trailer. However, if it's necessary to carry full bins up a slope, the tractor might need a counterweight at the front end. It will also pay to shorten the lift arms on the hitch so bins can be carried as close to the tractor's rear axle as possible. This economical rear-lift unit enables one man to haul from 8 to 12 bins an hour from orchard to loading area.

Some growers have bought special lift equipment that can be mounted on either truck or tractor, and will

lift two full bins at a time. Others have lift equipment at both ends of a tractor, which allows them to carry two full bins at the rear and one at the front (not generally recommended, because it might put an overload on the tractor).

These hydraulic machines have revolutionized fruit handling. Conveniently placed and stacked two-high, 16 bins can be loaded in about 7 minutes.

An Okanagan manufacturer has built a special carrier which can haul 12 bins directly from orchard to packing plant. Operating much like a lumber carrier, this machine picks up a line of 4 bins and stacks one line upon another until the load is 3 bins high. However, agriculturists feel the cost of this unit makes it impractical for short-season fruit areas, such as we have in Canada. It might prove very useful in southern regions where it could be used for 6 or 8 months a year.



[Guide photos]



ABOVE: This simple fork-lift, used by most small growers, can be bought for \$75 to \$100. Truck must be backed into pit or to a ramp if equipment is to be used for loading bins.

LEFT: This is a special hydraulic lift which has been built onto the rear of a truck chassis. It can move bins readily from ground to truck platform.

## RUPTURED BE FREE FROM TRUSS SLAVERY

Surely you want to THROW AWAY TRUSSES FOREVER, be rid of Rupture Worries. Then Why put up with wearing a gripping, chafing and unsanitary truss. For there is now a new modern Non-Surgical treatment that is designed to permanently correct rupture. These Non-Surgical treatments are so dependable, that a Lifetime Certificate of Assurance is given.

Write today for our New FREE BOOK that gives facts that may save you painful, expensive surgery. Tells HOW and Explains WHY NON-SURGICAL Methods of Treating Rupture are so successful today. Write today—Dept. H8723.

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## MUSHROOMS \$4.50

\$4.50 lb. for dried mushrooms. More growers wanted. Everything supplied.

Dehydrated Products & Chemicals  
Box 548 Calgary, Alberta

**A**

67% plump, 3% thin  
6% peeled and broken  
bright  
bushel weight—49 lb.

**C**

69% plump, 4% thin  
3% peeled and broken  
weathered  
bushel weight—48 lb.

**B**

68% plump, 3% thin  
2% peeled and broken  
bright  
bushel weight—48 lb.

**D**

60% plump, 6% thin  
1% peeled and broken  
bright  
bushel weight—48 lb.



"Placing a class" of barley samples at Portage la Prairie

# Can You Pick the Barley That "Went Malting"?

**Try your hand at judging malting barley! See if you can pick the sample that the maltsters would select.\***

**Just study the Grading Results shown above and circle your choice here:**

**A C B D**

Sample "A" wasn't liked by the maltsters because it contains more than 4% peeled and broken kernels. Peeled and broken kernels either germinate improperly (the sprout grows through the side of the hull) or not at all; often they are a source of injurious molds.

**Growers' Tip:** Reduce cylinder speed to less than 6,000 feet per minute (see your operator's manual for converting fpm to rpm); raise the concaves to a "nearly-closed" setting in the morning and late afternoon when humidity is high, and lower the concaves when humidity is low. Your combine is properly adjusted if a  $\frac{1}{8}$ " to  $\frac{1}{4}$ " awn adheres to the kernels.

Sample "C" was found wanting because it is weathered. This often causes the kernels to "slip their skin" during the malting process.

**Growers' Tip:** Use drill with run spacing of not more than 6"; keep stubble height between 5" and 8"; and co-ordinate ground and canvas speed to lay a well-bound, protected swath.

Sample "D" almost went malting. It was rejected because it contains 60% plump and a high percentage of thin and immature kernels. Thin (or "shoepeggy") kernels contain too much hull—and yield very little malt.

**Growers' Tip:** Swath after the barley is ripe—not when it is on the green side. Usually this will be about a week before maturity date for straight combining.

You were right if you picked sample "B" as the barley that "went malting." Knowing how to grow and harvest a malting barley is your business. Just as knowing how to store and handle your malting barley is your U.G.G. agent's business. He can help you with little things (but important ones) like supplying the right malting variety and the right kind and rate of fertilizer for growing it.

And most important, because of special in-service training, your U.G.G. agent can take good care

of your barley once it is delivered to him. Making sure that your barley is handled gently before it reaches the terminal is his job.

You will find that it pays to haul your malting barley—in fact, all your grain—to the United Grain Growers. It is a farmers' company in every sense of the word . . . and operates in a business-like way. United Grain Growers was started by farmers. The voting stock can only be obtained by farmers. And farmers are the only people who have a say in its management. The sole object of the company is to handle your grain and farm supplies and protect your interests.

\*Assuming adequate supplies of malting barley are available.

## Free Booklet on Malting Barley

Please mail coupon to United Grain Growers, Hamilton Building, Winnipeg, Manitoba.

Please mail me a copy of the 24-page booklet entitled "Malting Barley Production in Western Canada."

Name \_\_\_\_\_

Address \_\_\_\_\_

62-A

# United Grain Growers

— The Farmers' Company —



## Science Now Shrinks Piles Without Pain or Discomfort

Finds Substance That Relieves Pain  
And Itching As It Shrinks Hemorrhoids

Toronto, Ont. (Special)—For the first time science has found a new healing substance with the ability to shrink hemorrhoids and to relieve pain and itching. Thousands have been relieved with this inexpensive substance right in the privacy of their own home without any discomfort or inconvenience.

In case after case, while gently relieving pain actual reduction (shrinkage) took place.

Most amazing of all—results were so thorough that sufferers made statements like "Piles have ceased to be a problem!"

The secret is a new healing substance (Bio-Dyne)—discovery of a famous scientific institute.

Now this new healing substance is offered in suppository or ointment form called *Preparation H*. Ask for it at all drug stores—money back guarantee.

### For Each Member of the Family . . .

The Country Guide's editorial staff provides inspiring and practical suggestions to help you succeed as well as for better living.

# Through Field and Wood

No. 46

by CLARENCE TILLENIUS

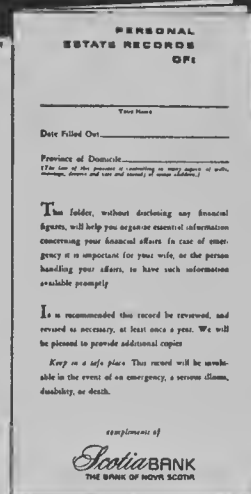
**H**OW wonderful to be young! Especially if one is a young black bear cub—or better still, two black bear cubs—when all the world is summer and the whole forest a playground.

No responsibilities, no cares, nothing to do but eat, play and sleep, and always in the background mother black bear, mighty and resourceful to shield from temptation and danger alike. Also, alas! not above administering a resounding clout on a furry rump when youthful obstreperousness finally stretches her matronly temper past the snapping point.

For if black bear cubs have a single fixed idea (never, of course, observed among humans) it is that the long summer's day was made for one purpose only: to crowd the utmost possible mischief into the interval between opening one's eyes in the



**This  
booklet**  
can help you  
**protect**  
the future of  
your property



Almost daily you make decisions which may affect the future of your farm or ranch. But what happens if, for any reason, you are suddenly unable to act for yourself? Will your property continue to be run the way you'd like and by those you'd like to run it?

Scotiabank has produced a helpful booklet called "Personal Estate Records of . . .". It can be filled out to become a complete record of all documents (including the location of your will), insurance policies and securities concerning your estate. Using it, those who come after you can work swiftly and surely following your wishes toward the best interests of your property. Copies of "Personal Estate Records of . . ." are available free at any branch of

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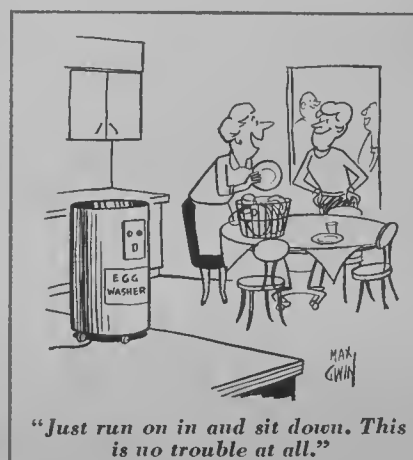
morning and closing them again at night.

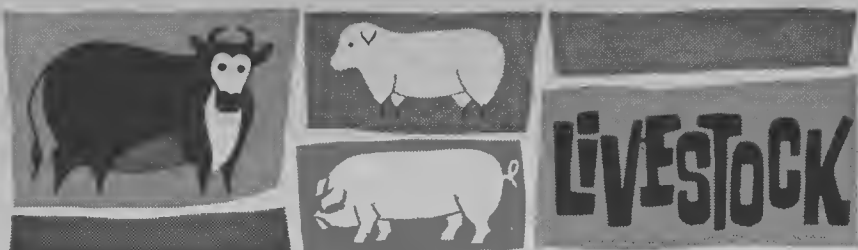
At times they are irresistibly droll. At a fishing lodge in Ontario where I spent some time many years ago, the pet of the place was an orphan bear cub. Endearingly self-centered and spoiled by everyone, his great specialty was wheedling pancakes from the cook. The rules of this game, established by the cub—and entered into wholeheartedly by the cook—were that the cub first sat up at the kitchen door clutching his stomach and whining dolefully. Translated, this meant: "I'm a poor starving bear cub, no home, no friends. Can I have a pancake?" The cook would shake his head in a stony-hearted way. The cub would then break into loud lamentation and cries of grief, covering his eyes with his paws—while at the same time one eye peered out cunningly to see what effect this had on Simon Legree. The pancake was always unfailingly forthcoming.

**B**UT two bear cubs in the woods are sometimes even funnier. Earnestly they pad along after their mother, shoving their noses into what concerns them—and much that

doesn't. When the mother's back is turned, or while her attention is elsewhere, an impromptu wrestling match usually breaks out, ending with one getting the worst of it and bawling for mother, whose prompt arrival heralds sudden peace—or at least a cease-fire.

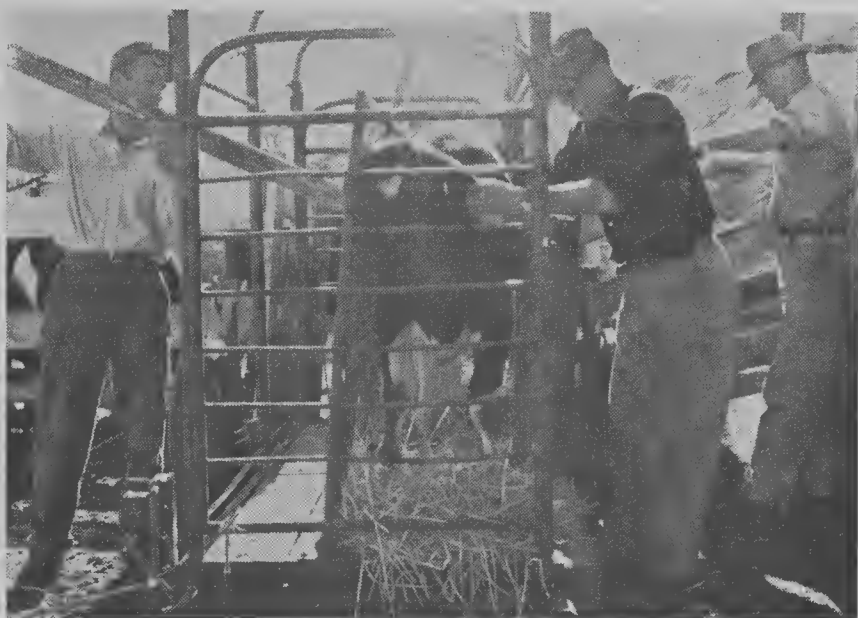
The complaining cub hanging on grimly in the drawing will probably get a bump. But do not waste sympathy on him where he asks for none. Fifteen minutes later, he will be figuring out a ruse that will pay his brother back in spades. v





## Beefman's Profits Are More than Doubled

*Balanced ration and proper records  
worked wonders, says Gordon Harris*



[Guide photos]  
Harris (second from right) administering blackleg injections, stilbestrol implants and ear tags to new steers, while Indian Head crew weighs cattle.

**"YOU** can say one thing for the feed shortage. It's made us more conscious of good livestock rations. We are no longer thinking in terms of using up grain, regardless of cost, but of properly-balanced and processed rations that are effective and economical."

This has been the recent experience of Gordon Harris, who operates two mobile feed mills and has a feedlot on his farm at Yorkton, Sask.

"With a proper feed mill, a farmer can stretch the grain supply by adding roughage, minerals and vitamins scientifically," says Harris. "Having a mobile mill visit the farm is particularly attractive for the man with 100 or so beef cattle, as well as those with dairy, hog or poultry enterprises. The mill does a better job of

processing grain than the average farm mill does, and that should mean higher production."

One farmer served by the mobile mill says he is saving 10 bushels of grain per steer. Another has increased milk production by 4 gallons per day. A factor shown by the mill is the amount of junk in grain fed to cattle. Two magnets on the machine pick up loads of nails, nuts, wire and other causes of hardware disease, which might have stayed in the feed.

Gordon Harris is his own best testimonial to feeding efficiency, aided by regular weighing and proper records. He claims that his yield of beef increased by 1½ per cent when he adopted a properly mixed ration. He realized an extra \$224 on one lot of 21 cattle he shipped, and the grades were better too. Also, gains have become more uniform and the incidence of disease, such as footrot, has decreased.

As a result of providing an illustration farm for the Indian Head Experimental Farm, Harris has a monthly visit from a crew with mobile scales, and has been able to set up exact records which are analyzed at Indian Head. Since he started to weigh his cattle every month, his progress is shown very clearly. In 1959 his net profit per head was \$13.16, in 1960, it jumped to \$20.16, and last year it went as high as \$29.16. The 1961 net profit on 257 head of mixed breeding was \$7,348. Total expenses were \$44,053, including the purchase of feeders.

Labor in 1961—for feeding, haul-

ing grain, and weighing cattle monthly—totaled 412 hours. Since cattle were fed for an average of 115 days, this labor averaged a little less than 1 minute per head per day. Previous records showed an average of 1 minute and 12 seconds per head per day, which Harris reckoned to give a return on labor of \$9.95 per hour.

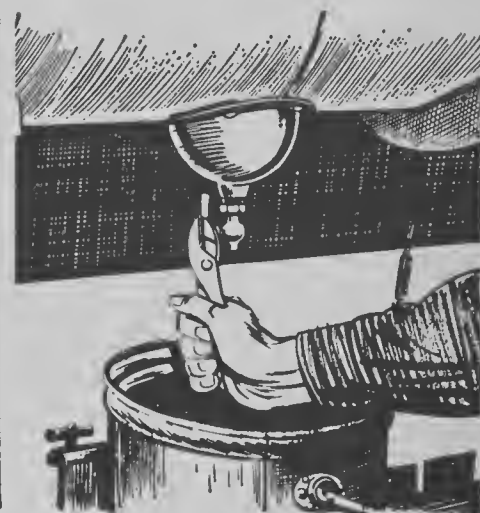
Average weight of cattle when bought last year was 635 lb., and the gain per day was just under

2.5 lb. They consumed an average of 16 lb. of grain and 3.5 lb. of roughage each per day. In one 29-day period last summer his average daily gains were 3.91 lb., and he has gone as high as 4.2 lb. average for finishing steers.

These are pretty attractive figures. They are the result, says Gordon Harris, of mixing a balanced ration efficiently, and knowing where you're headed by keeping records. —R.C. V

## TEXACO FARM TIPS...

**PROTECT  
DIESEL FUEL  
INJECTOR  
WITH PERIODIC  
TANK DRAINS**



The fuel injectors in your motor can rust from the condensation caused by temperature changes in the fuel tank on your rig. Many operators have pretty well solved this problem by partially draining the fuel tank at regular intervals. Simply draw off about a gallon of fluid through the drain valve at the bottom of the fuel tank. You lose some fuel this way, but you also get the accumulated water and other contaminants clear out of the fuel system. The cost of the fuel you drain off is a small loss compared to the repair bills you save on the fuel injectors. To obtain maximum drawbar power from your diesel; to secure steady, trouble-free running at minimum cost, always use Texaco Diesel Chief. Wherever you find the big jobs, you'll find Texaco Diesel Chief. Diesel Chief is available on prompt delivery from your Texaco Farm Supplier—the man you trust for the efficient provision of all your fuel and lubrication requirements.

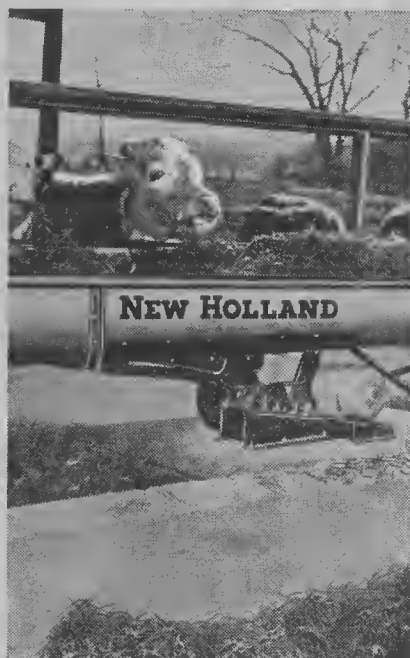
IT PAYS TO FARM WITH...



"Properly mixed ration is effective and economical," says Gordon Harris.

# NOW— the first complete hay-feeding system!

New Holland now introduces the world's first complete hay-feeding system!



New All-Purpose Vibra Feeder handles hay, silages, concentrates, or other feeds!

All you do is place bales in the mow on the 131 Bale Carrier. Bales are then automatically fed into the new Model 175 Bale Separator, where they are fluffed up and delivered to the new Model 560 All-Purpose Vibra-Feeder.

The Vibra-Feeder then reciprocates at about 250 strokes per minute to convey the fluffed hay along its smooth, curved trough at up to 30 feet a minute. The Vibra-Feeder handles all forage crops, roughages, concentrates, and grains, too. One 3-horsepower motor can handle 1½ tons of green chop in units up to 102 feet long.

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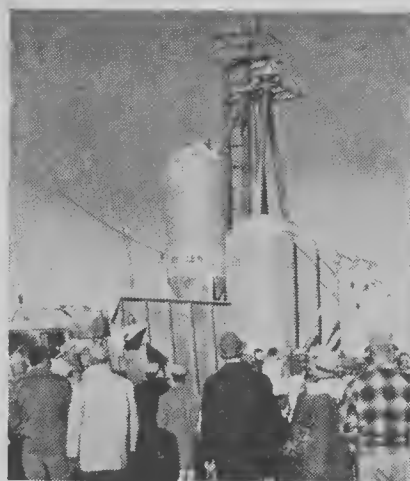
## Feedlot Developments in East and West

### A LOOK AT AUTOMATION

THERE has been a big increase in cattle feeding in the last few years, particularly in the West. In the United States, the trend has been away from the small farm feeding operation to large, specialized feedlots. Here in Canada, many farmers began to feed cattle to utilize surplus grain, and have kept on feeding although grain stocks have all but disappeared. Lately, we have seen a trend to bigness too.

Once considered an art, cattle feeding has now become a science, as one expert recently said. The old philosophy that "the eye of the feeder fattens the animal" has given way to the scientifically prepared ration where little is left to chance. Many such enterprises make no attempt to produce any of the feed ingredients they use. They have become beef finishing factories, in fact.

These modern feedlots are equipped to handle most ingredients in bulk—to mix and dispense them with a minimum of time and labor.



This bin assembly has tractor-powered roller, elevating and loading systems.

### "HAYLAGE" IS HERE

TAKE 2,400 acres of Quebec's finest farm land. Add some of the newest and most costly machinery for working that land, and devise a cropping program for maximum production. Install new



Farm manager Mareel Beaumier (r.) looking over steers with Vie Pelehat.



Farmers gather to watch a silage unloader at work at the Zeus Farms feedlot near Okotoks, Alta. A special truck mixes ration en route to feeders.



Truck has dumped ration in troughs and added molasses at the same instant.

Feeders have been forced to do this because the rising cost of goods and services has narrowed their margin of profit. Where, in 1940, a feeder could make a profit of \$50 a head, today he generally has to be satisfied with about \$12 a head. And a few

management errors can soon turn this into a loss.

Some find the answer to this problem in automation, on the assumption that it allows a feeder to increase his cattle numbers without greatly increasing his overhead.—C.V.F. V

silos, as well as a carefully designed beef feedlot. You should then have an enterprise that can give further evidence of just how big and specialized farming can become in Eastern Canada.

At Ste. Elizabeth, a company from France, La Societe des Cultures des Terres Noires, has developed one of the most surprising feedlots in this country.

It's a spectacularly costly unit. Once the land was purchased, the big expenses of building had to begin. Harvestore silos were installed—200-ton, air-tight structures which handle low-moisture silage. A battery of these towering structures—16 in all—stand like mighty sentries on the farm today. Four wedge-shaped feeding paddocks are laid out in an arc beyond the silos. Pole barns are located along the outside edge. More than 1,000 steers at a time are fed there—making a total of over 3,000 a year.

Nerve center of this complex feedlot is a bewildering panel of switches located in the central feed



Hay, grain and corn from 2,400 acres are stored in 16 of these huge silos.

room. These allow pushbutton control of the system of augers and mixers which move the feed from storage to mangers. Feed can be



augered out of the bottom of any silo and along to the central feed room. Minerals and supplements can be added here to balance the silage ration. Then, the ration is augered out to any of the feed bunks. It's a costly unit, but so well mechanized that two men can easily look after the feedlot.

The entire cropping program is aimed at producing quality feed for the silos. In 1961, this consisted of 1,000 acres of hay, 1,000 acres of grain, and 400 acres of corn.

**H**AY is stored as haylage, a low-moisture form of silage. Since the silos are air-tight, and unload from the bottom, this product can be stored without spoiling. Because it is stored green, stands of hay can be cut in early spring, in the pre-bloom stage, when protein content is high. The hay is then wilted down to about 45 to 55 per cent moisture before being ensiled. Cattle can then eat more volume of such low-moisture silage, reducing their need for supplements, without sacrificing rate of gain.

It's one thing to develop a program of this magnitude, and something else again to make the investment pay off. How is this farm faring in its balance statement?



Haylage is augered from base of silo, supplements are added in feed room, then it goes directly to feed bunks.

It's undoubtedly too early to say for sure, but farm manager Marcel Beaumier figures it this way. Each of the 3,000 steers should gain about 300 lb. during its stay in the feedlot. The farm should then make about 900,000 lb. of beef, on the hoof, per year. That's nearly 400 lb. to the acre. Beaumier is confident that his costs are low enough to allow him a profit under these circumstances.—D.R.B. V



Ensiled feed can be augered to the bunks in any of the wedge-shaped pens.

## AI in Beef Herds

**H**ERE are some advantages of using artificial breeding in beef cattle, as listed by Dr. W. E. Howell of the University of Saskatchewan:

- Maximum use of outstanding bulls, with early and accurate proofs and more rapid improvement within the beef cattle population.
- Greatly increased uniformity by having many calves sired by the same bull.
- Shorter calving period because more cows are bred and settled in their first heat than in natural service, where a bull may have more cows than he can handle in the first go-round.
- Improved quality because performance testing and evaluation of type and carcass bring superior bulls into wider use, raising the population average for the important characteristics.
- Improved herd records because

parentage and dates of breeding and calving are known for each individual, and replacements can be selected more accurately.

- Improved management through closer observation of the herd.
- Better health because transmission of venereal diseases is practically eliminated by disease-free semen and sterile instruments.
- Better protection against inherited defects through more rigid sire selection with progeny testing.
- Simpler crossbreeding in large or small herds, enabling commercial breeders to take advantage of hybrid vigor through crossing breeds, without the added trouble of maintaining bulls of several breeds, and without cross fences to separate pastures for each breeding combination.
- Reduced breeding costs to between \$3.50 and \$6 per cow in rancher herds versus \$8 to \$9.50 per cow in natural breeding. Costs vary with size of herd and the value of bulls, but AI can be generally half the cost of natural breeding. V

## Potato Pulp Makes Good Feed

**T**HE New Brunswick government's new policy of subsidizing potatoes that are grown for the province's starch factories has resulted in another good and inexpensive feed for dairy and beef cattle, and for swine, too. The feed is potato pulp, a by-product of the starch industry.

Potato pulp itself isn't new. It has been produced in several recent years. But potato starch factories



Conrad Beaulieu bags up dried potato pulp at Valley co-operative's plant.

have traditionally relied on surplus potatoes to keep operating. In years of high potato prices, the starch factories starved for supplies.

Last year, for the first time, potatoes were grown specifically for the starch factories. Now, plants like that of the Valley Co-operative Limited at Grand Falls can expect to operate every year. This means the pulp will be produced in substantial quantity every year, too.

The pulp is also winning acceptance among farmers. It is a good conditioning feed, and is sold with a guaranteed minimum crude protein content of 6.5 per cent. Local hog men have begun to use it in their rations. Some of the biggest hog feeders in Quebec have tried it out. It is being used in at least one big steer feedlot in Quebec, as well.

Local dairyman Adrien Guimont at Grand Falls began adding it to the ration for his 90-cow herd last



Ernest Ridout finds that Guimont's cows relish ration with potato pulp.

# Most advanced grain-drying technique!

New Holland's exclusive new process alternately heats and tempers grain, circulates it at the same rate for faster, more even drying.

Only New Holland combines fast, high-quality, high-capacity drying with gentle handling and safe, easy operation.



Automatic controls make New Holland Grain Dryers extremely safe and easy to operate. Pilot light tells at a glance how burner is operating.

Another valuable feature: The sectionalized bins may be filled separately to permit drying large or small batches.

Both electric and PTO models available in your choice of LP- or natural-gas burners.

See your New Holland dealer soon. New Holland Machine Company (Canada) Limited, P.O. Box 459, Terminal A, Ottawa 2, Ontario.



**NEW HOLLAND**  
"First in Grassland Farming"

fall. He reports that he maintained production and cut costs while doing it.

Guimont's herd was being fed grass hauled to it under a zero grazing program when he began feeding pulp. He mixed the following ration: 500 lb. 32 per cent dairy concentrate, 980 lb. oats, 300 lb. potato pulp, 200 lb. bran, and 100 lb. each of molasses, corn and shorts.

Starch factory manager Ernest Ridout says that he expects to sell about 3,000 tons of the potato pulp this year, and hopes to increase production in the future.—D.R.B. V

## Not Always Due to Vibriosis

**D**ON'T jump automatically to the conclusion that dry cows and abortions mean vibriosis. Dr. J. G. O'Donoghue of the Alberta Veterinary Service says the disease is undoubtedly responsible for some of the cases reported recently by commercial beefmen, but many are likely to result from last summer's dry pastures and severe winter conditions, accompanied by inadequate feed supplies in some districts. A lack of vitamin A or a poor general condition often interferes with the fertilized egg becoming implanted which, of course, results in a non-pregnant cow. Only 8 per cent of 235 aborted calves were due to vibriosis in 1961, according to the Alberta Veterinary Laboratory's report.

Dr. O'Donoghue says that vibriosis was diagnosed on a number of premises last year through the cervical mucus test. This test, performed by a veterinarian, will help to confirm the presence or absence of the disease, but the most accurate way is by isolating the specific germ from aborted calves. There is still no satisfactory test for individual animals that will not get in calf. V

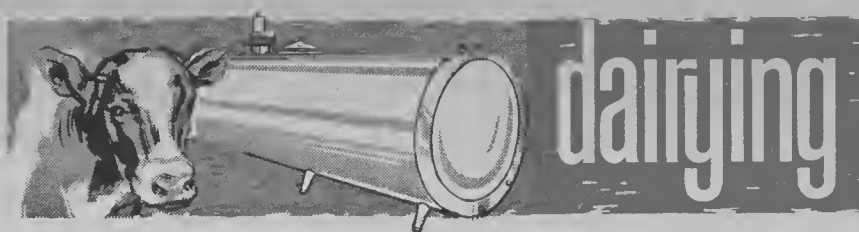
## More Tests For SPF Pigs

**E**XPERIMENTS with Specific Pathogen Free (SPF) pigs will be carried out at the Ontario Veterinary College when a new building is completed there, plus an extension to the existing holding pens.

As reported in The Country Guide in March of last year, the idea of SPF is to remove pigs surgically from the sow before birth, thereby producing pigs that are known to be free of atrophic rhinitis, tuberculosis, and virus pneumonia. The young pigs are reared in incubation rooms during early life.

The SPF pigs are born in a germ-free plastic balloon, with the surgeon performing the caesarian operations through two circular armhole entrances with air-tight rubber sleeves. The pigs are then moved to other sterile balloons, placed on lazy-susan containers, and fed for 2 or 3 weeks before going to the brooders.

Construction of the SPF facilities at Guelph has begun. V



## How to Feed Corn to Dairy Cattle

**"C**ORN is an excellent feed for dairy cows—if you can make good its deficiencies," according to J. B. Stone of the Ontario Agricultural College. "It needs to be mixed with bulkier feeds such as wheat bran, corn cob meal, or rolled oats," he says. Here are more of his ideas on feeding corn:

- It pays to grind shelled corn medium-fine. Experiments showed that 18 to 35 per cent of unground shelled corn passed through the animal unchewed and with little digestion. The exception is the calf up to 8 or 9 months, which can chew it thoroughly.

- Generally, up to 50 per cent corn and cob meal can be used in the ration.

- Cattle on a high corn ration should be fed by weight rather than by volume.

- More protein supplement must be used to bring a high-corn dairy ration up to the standard 14-16 per cent protein level, but the corn and cob meal ration costs about \$11 less per ton than an oat-based ration, at recent prices in Ontario.

Some rules-of-thumb for corn feeding of dairy cattle are laid down by Stone as follows:

V In most cases, the amount of high-corn feeding will depend on the type of market available for milk, level of production, and the owner's feeding ability.

V High producers and average-producing cows in the first 3 to 4 months of lactation may be fed 1 lb. of the ration for every 3 to 4 lb. of milk. Remaining cows may be fed 1 lb. of ration for every 4 to 5 lb. of milk.

V Dry cows and bred heifers, in the last 2 or 3 months of pregnancy, may be fed 4 to 10 lb. of the ration per day, depending on condition of the animal, quality of forage, and length of dry period.

V Yearling heifers may be given 2 to 5 lb. of the ration daily, again depending on condition of animal and quality of forage.

An example of a high-corn ration, quoted by Stone, includes 1,000 lb. corn and cob meal, 300 lb. rolled oats, 250 lb. barley, 100 lb. wheat bran, 350 lb. soybean oil meal, making a total of 2,000 lb. of 15.5 per cent protein, at a cost of \$54.75.

A comparable oat-based ration is given as 1,400 lb. rolled oats, 300 lb. barley, 100 lb. wheat bran, 200 lb. soybean oil meal, making 2,000 lb. of 15.4 per cent protein, at a cost of \$65.60.

These prices are retail (delivered at the farm) and will vary with the

locality and time of year. Grinding and mixing are not included, and on the farm the cost would be about \$4 to \$6. Salt and minerals have not been allowed for. V

## Ways to Curb Mastitis

**M**ASTITIS, in spite of all the effort that has been put into mastering it, is still the dairymen's scourge. However, it need not be quite the menace it is, if dairymen know more about it and apply the proper precautions. Here, in brief form, are the main points as outlined by Dr. John Tanner of the Saskatchewan Department of Agriculture.

- Mastitis is inflammation of the udder caused by many types of bacteria—the staphylococcus type is the hardest to clear up.

- Bacteria can enter the cow's udder through an abrasion on a teat, or a wire cut. The deeper the wound, the greater the risk.

- Infection can enter even when the udders are intact. If a cow is lying in a dirty stall, bacteria may rise up the teat by capillary action along with fluid.

- Bacteria can enter the udder through the bloodstream or lymphatic system, but this is quite uncommon.

- Bacteria find a warm area in the udder and start to reproduce. The cow's body counterattacks with blood, resulting in a hot, painful, and swollen udder. The cow is uneasy and resents handling. If the process continues, the body tries to wall off the bacteria with fibrous

tissue, with the result that areas of the gland are lost for production.

- The answer to mastitis is essentially good husbandry and hygiene, prompt attention and correct treatment.

- Wounds in the udder should have immediate attention.

- With hand milking, use antiseptic solution on the hands and be sure that udder and teats are clean before milking.

- With a milking machine, maintain proper pressure and don't use damaged teat cups. Have a good antiseptic for teat clusters, and rinse them in the dip before each milking. Wipe udder with cloth dipped in warm water.

- Cows known to have mastitis should be milked last to avoid risk of contamination.

- A cow that was cured by one drug doesn't mean that all cows should have the same treatment. The wrong treatment may make it worse.

- Use a strip cup for easy detection of any curdiness, flakes or slime.

- Milk at regular times, both for maximum production and to avoid mastitis conditions.

- Do not disturb the delicate membrane in the cow's teat by introducing a straw or other home-made milking device into the teat. Milking devices should be used only on the advice of a vet and after complete sterilization. V



## Feeder-Silo Combination



**T**HE walls of these two parallel covered feeders form the sides of a 100 ft. by 36 ft. bunker silo. At feeding time, silage is transferred to wagons with an overhead loader. The wagons are then emptied into the feed troughs as they are driven through the sheds. This layout can handle over a hundred cows.—C.V.F.

# POULTRY

## Some Still Choose To Take Up Farming

*George Camp left the city and is now producing two turkey crops*



[Guide photos]  
We need an agency to handle turkeys and shop around for us, says George.

**W**E often hear of the exodus of farm people to city jobs, but seldom of those who are heading the other way. About 2 years ago, city-dweller George Camp of Calgary decided to leave the concrete jungle and become a turkey grower. A Bachelor of Commerce graduate, George was a purchasing agent for an oil company. He wanted to try a business that would enable him to be outdoors as much as possible—something which would keep him from joining the “ulcer brigade.”

George's Strathmore Turkey Farms Ltd. is an automated operation geared to produce two 12,000-bird flocks a year. Brooding dates are March 1 and June 1, one flock being destined for the Thanksgiving market and the other for Christmas. The birds are raised in semi-confinement. Exercise is provided in outdoor runs located adjacent to each turkey house.

“I don't believe in close confinement rearing,” said George. “Birds stay healthier if they're allowed some exercise.”

To reduce the labor of feeding, George and his manager, Buster Berreth, built an automatic feed wagon which will fill a self-feeder with mash in about 60 seconds. It is mounted on a North King “snow buggy” chassis—a vehicle used to transport oil drilling equipment in northern muskeg.

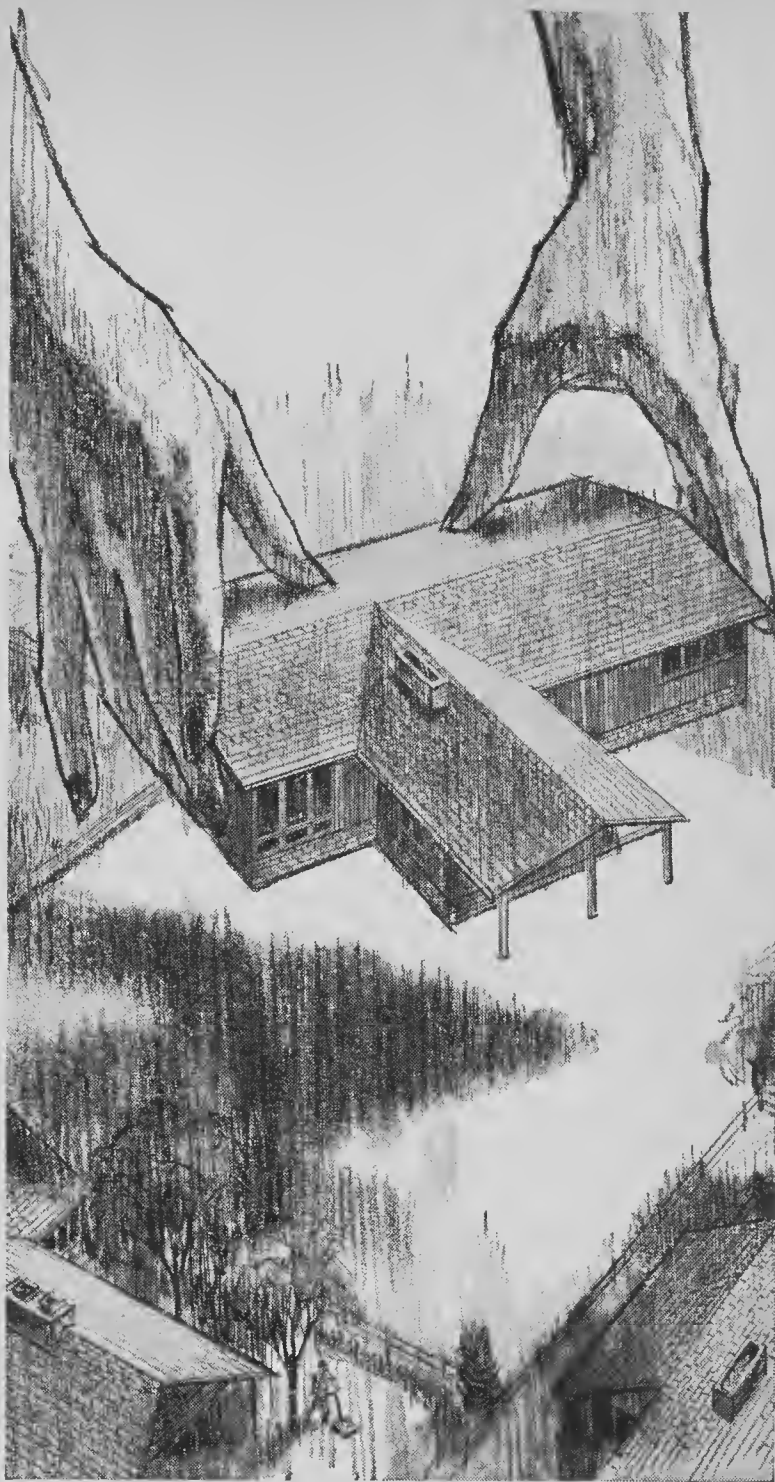
The feed wagon has an extended box which gives it a capacity of 4 tons. Inside, the floor slopes down to a 10-ft. bed auger which rides in a channel made from a piece of 5-in. casing cut in half. A 6-ft. upright auger discharges feed from the wagon's rear. Both are driven from the power take-off of the small tractor used to pull it. This equipment can handle the full feeding chore in an hour.

Birds from Strathmore Turkey Farms are processed in Calgary, and most of them shipped to the Vancouver market. After an experience of selling his birds for 21 cents a lb. (slightly below cost), then later seeing them go for 49 cents in a supermarket, Camp is inclined to favor a producers' marketing board similar to the one B.C. has set up for its broiler industry.

“We need an agency that can shop around and let us know what the real supply situation is,” George stated. “The B.C. broiler price has stabilized since they've had some control on production. Farmers who raise birds as a sideline help to keep prices down here. They're inclined to let them go for anything they can get without considering the cost of feed and labor that has gone into them.”—C.V.F. V



Provision of an exercise yard plays a useful role in the flock's health.



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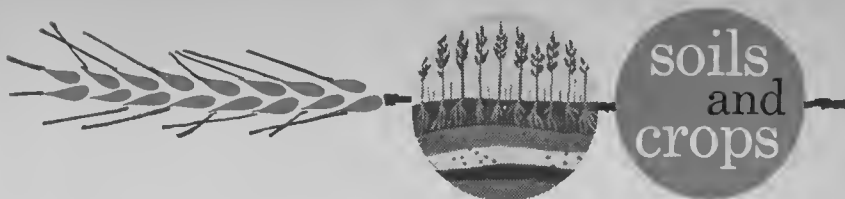
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ALWAYS LOOK TO IMPERIAL FOR THE BEST



The pair of haystacks with lightning rods at the Mills farm, Medora, Man. The rods can be removed and used again when stacks are built next season.

### Haystacks with Lightning Rods

**L**IGHTNING rods on haystacks are rare, to say the least. But Ewart Mills, who farms at Medora, Man., tried them last summer and felt a lot easier about the safety of his valuable hay.

Mills called in a veteran of the lightning rod business, A. E. Halstead, and put the problem to him. He had two stacks enclosed within a 5-ft. fence. He wanted to be able to remove the rods in the fall, after the lightning season, so that hay could be tossed over the fence to his cattle in the yard. Then he wanted to install the same lightning control systems again after the next hay harvest.

Halstead decided that each stack, being 50 ft. long, would need three points connected to a cable which would be grounded at both ends of the stack. He mounted the points on stands and attached these to planks, which were secured on top of the stacks. The cables ran along the ridges of the stacks and down to the fence, where they were cut and spliced together again with clamps, and then continued to a depth of 10 ft. in the ground. That made it simple to take the lightning rods apart by unbolting the clamps when the stacks were to be broken up, and they were all ready to be installed again when new stacks were built.—R.C. V

### Good Yield From Dover Barley

**A** NEW winter barley, known as Dover, has been tested during the past 3 years and is reported by the Ontario Department of Agriculture to be over half again as strong in straw as Hudson, which it also outyielded by almost 10 bushels per acre.

Resulting from a Wong-Kenete cross, Dover is 2 to 3 inches shorter in straw than Hudson, 2 days earlier

in maturity, and carried 1.3 per cent mildew as compared with Hudson's 7.2. It is also slightly more winter hardy. Its one drawback is a rough awn.

There should be limited supplies of Dover for seeding in the fall of 1963. V

### Sod Land Attracts Wireworms

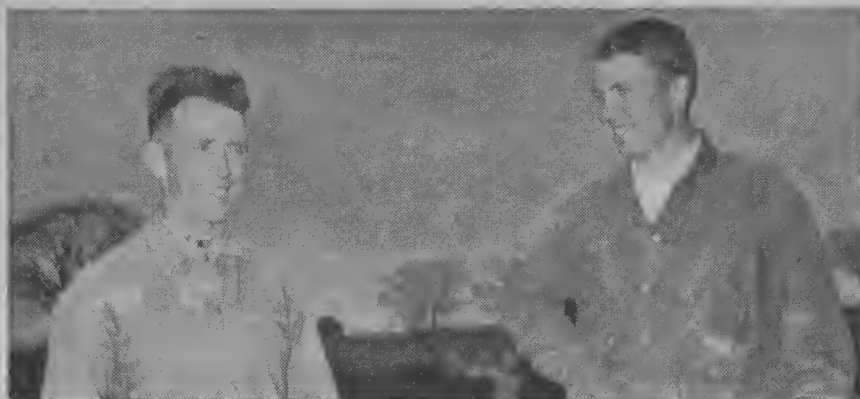
**W**IREWORMS, the golden brown larvae of click beetles, attack the roots of a great many plants. They are usually most troublesome in fields that remain in sod too long. They don't kill plants, as a rule, but can cause low yields of grain and grass crops. They also bore into potato tubers, strawberry crowns, and edible root crops. Growing such crops on newly plowed sod land often leads to considerable loss due to wireworms.

Prof. V. R. Vickery of Macdonald College, Que., says one of the best ways to prevent wireworm damage is a short rotation, including a legume in the hay crop. If an insecticide is needed, use aldrin at 3 to 6 lb. of actual chemical per acre. The heavier rate is for the more intensive infestations. Apply the aldrin evenly to the soil surface as a dust, spray, or in fertilizer. Then disc the land immediately to a depth of 3 to 4 inches.

The chemical persists in the soil for a long time, losing about one-fifth of its protective value each year. It also protects against white grubs and some root maggots affecting vegetables. V







The George Maxwells say feeding steers is like building a house. You need a plan, starting with the forage test and then building rations around it. (Guide photos)

## Forage Testing Saves Feed Dollars

*This program is helping both beef producers and dairymen*

ACCORDING to beefman George Maxwell, testing your forage and then building suitable rations around it, is the key to feedlot profits today. Another young Bruce County, Ont., beefman, Art McKague explains the same idea another way: "Forage testing is a way to cut costs and save money in a beef program. At least, it is saving money on our farm."

Maxwell and McKague are only two of a couple of dozen district farmers who have begun to make use of this new technique. Forage testing is a service offered by their farm management association, and agricultural representative George Gear says the program can pay off well. He recalls that one dairyman in 1961 saved 50 cents per cwt. on the milk he produced, by having his hay evaluated. The dairyman learned that his hay was of such high quality that the cows required much less supplement than he was feeding.

Another steer feeder found that his hay was good enough for the steers to gain 1½ lb. per day on hay alone. He kept feeding grain nevertheless, and some of the steers were ready for market by spring—although they were supposed to be on a wintering ration.

Forage testing is an idea that is just beginning to win attention. Some commercial feed companies today will test forage samples, and suggest the kind of rations to build up around them. Several state extension services in the United States are trying out the idea — and winning remarkable acceptance for it too. The driving force behind the Bruce County program is ag. rep. Gear.

Gear noticed in recent years that most cattlemen use rules of thumb in drawing up their rations for their cattle. They feed a pound of supplement for each three or four pounds of milk produced, for instance. But, such rules don't take into account the tremendous differences between samples of hay or silage.

"Hay that has lots of clover in it, and is cut early enough, should be good enough by itself, without any supplement, for a cow to produce 9,000 lb. of milk on," he says. "Other hay, that is stemmy and cut too late, requires much more supplement."



McKague avoids waste through forage test, follows Gear's recommendation.

Gear heard of a forage testing program that farm groups in the U.S. were using, and made a visit to see it first hand. He came back and set up a program for his own county.

"The program," he says, "is based on a simple premise: an animal requires only so many nutrients (or T.D.N.) to produce a certain amount of milk, or to grow or fatten at a particular rate. Quality roughage is the cheapest feed there is. If the forage is of high enough quality, it's a waste of money to add a lot of grain and concentrate to the ration. There is no use poisoning an animal with protein."

Gear says that forage testing means simply finding out how good the forage is. Then a balanced ration can be built around it.

Fortunately, it doesn't seem necessary to run laboratory tests on each hay sample. Once a person has seen a few samples tested each year, he can tell the value of hay, quickly and accurately, by careful examination.

IN Bruce County, farm management association fieldman Larry Rosevear trains his eye to evaluate forages. Here is how: He sends a few hay samples, early in the season, to a feed company that is prepared to test them for protein, moisture, and fiber. He enquires about the stage of cutting of each hay sample—(whether it was early-cut, medium, or late),

and the leafiness of the sample (whether it is high in alfalfa and clovers). With this information, and with the protein content and the T.D.N. of the sample, the next step is to calculate the complete rations. Gear has devised simple charts which he uses for this, so that he can quickly draw up rations and supplements based on any forage sample, designed to do any particular job.

Although the program is catching on in Bruce County, George Maxwell, who has taken nutrition courses at the O.A.C., is one of the most enthusiastic for the program.

"It's like building a house," he says. "You need a plan before you start. We plan our rations on the basis of what we want them to do. For the past two years, we have been figuring out when we want those steers to go to market. Then we have

the corn silage and hay tested, and calculate the ration which is required to do that."

He goes even further. If the steers don't seem to be taking the feed well, he calculates the value of the rations he is feeding, to find out what is wrong.

Gear points out that forage testing not only helps farmers save money, it makes them aware of what is good hay. He adds: "The crucial factor in hay quality is earliness of cutting. Early-cut hay, even if it is rained upon in the field, is still the best."

He is so convinced, that he advises district cattlemen to start haying early—and keep going. "Begin the first week in June and keep right on going. It's more work to make three cuttings during the summer—but it pays off well, in better feed." —D.R.B. V



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## Nitrogen's Effect on Protein

IT goes without saying that nitrogen fertilizer increases yields of grain, but what does it do to the protein content? Prof. Bob Hedlin of the University of Manitoba reported recently on tests they have been making over a number of years. Here's what they have found so far:

- There is some evidence that where large increases in wheat yields were obtained by spring application of nitrogen, protein content may decrease, although only slightly. Where more nitrogen is added than is needed for yield increase, the protein content tends to increase.

- Protein is usually higher when the crop is on fallow. A fallow, wheat, wheat sequence showed a difference in favor of wheat on fallow of 0.5 per cent protein.

- Growing of legumes — such as alfalfa for hay or green manure crops — has given substantial increases in protein content of subsequent wheat crops. The difference was about 1.0 per cent protein for the first crop after legumes, and 0.7 per cent for the second, compared to wheat in a fallow-grain sequence.

Fertilizer experiments with barley showed a wide range of protein contents on non-fallow land, but protein content was related to nitrate nitrogen at seeding time, whether fertilizer was applied or not.

The greatest increase in protein content occurred where barley was fertilized with nitrogen alone. This was no doubt because, without phosphorus, nitrogen failed to give large increases in yield and the nitrogen was used to increase protein.

The significance of nitrate nitrogen at seeding time, and the response to added nitrogen, point to the importance of soil analysis in establishing a good fertilizer program, Professor Hedlin said. Fertilizer recommendations are based on treatments that have proved most profitable on the average for all farmers. In the university's experiments, applications of 60 lb. of nitrogen and 40 lb. of phosphate were best for 5 out of the 9 farms where the trials were made. Two other farms should have had a 10-40 treatment, and two more should not have been fertilized at all.

Obviously, there is value in predicting in advance the amount of fertilizer that should be used, both to get the most profitable yields and to avoid wasting money. Work is going ahead along these lines. V

## High Yield from New Barley

A FEED barley with a high yield has been developed at Macdonald College, Que. Named Champlain, the new variety results from a cross between Moore and Montcalm. It has outyielded York, Park-

land and Montcalm in field tests throughout Quebec. Its straw is slightly shorter than that of Montcalm, and it has good lodging resistance, similar to York. Maturity is about 3 days later than Montcalm. It has some resistance to powdery mildew and stem rust, and has better resistance to loose smut than York.

Seed supplies of Champlain barley are still limited, but it should be available for general distribution in 1963. V

## Poisons Demand Care

INSECTICIDES can be used without harm to the farmer if he follows recommended precautions and manufacturers' instruction. Dr. N. Williams of the Saskatchewan Department of Health points out that there are three ways of taking the chemical into the system—by swallowing, inhaling, or through the skin.

**Swallowing:** Common sense in storage and in use will prevent this hazard. A spray nozzle should never be sucked to unclog it.

**Inhaling:** Don't prepare or use chemicals indoors. Plan spraying so that it drifts away from you. Wear an approved respirator for the more poisonous chemicals.

**Through the skin:** Always have a container of clean water and soap handy to wash the skin if it is contaminated. Don't wear ordinary clothes, but have a special set of coveralls for spraying (waterproof clothing is needed only with Co-Ral and parathion). Always remove clothing after spraying, and wash body completely. If clothing is suspected of contamination, have it laundered before wearing it again. Don't wear gloves or shoes that are contaminated. If symptoms of suspected poisoning appear, change spraying clothes and wash body completely before seeing a doctor. V

## Good Yields on Dikeland

THERE'S no doubt about the productivity of marshland soils. Tests over a long period at the Nappan Experimental Farm, N.S., have shown that oats yielded an average of 40 bushels per acre on upland soils, compared with 54 bushels in dikeland areas. Upland hay yields were 1.33 tons, dikeland yields 2.98 tons.

Researchers at Nappan suggest that dikeland farmers should consider these results seriously, in view of the need for an expanded beef industry in Nova Scotia. Without lime or fertilizer, over a 3-year period, dikeland pasture gave 348 lb. of beef per acre, while adjacent upland produced 233 lb. With a moderate application of lime and superphosphate, the dikeland figure rose to 543 lb. of beef per acre, and 458 lb. on the upland. No cultural work was carried out in either of these areas. Lime and fertilizer were simply applied on the surface.

There are about 40,000 acres of this valuable dikeland in the province, and much of it is being used far below its capacity. V

## Simple Way to Harvest Corn

WILMER and Gordon Smale have found a simple and effective way to move corn from field to silo for storage as high-moisture grain corn. Their system saved the need for a corn picker and sheller, and left them with corn stalks for bedding as well.

Here is what they did. They clipped the crop with their forage harvester—when the ears were mature and firm, but still not too dry—just as if they were going to make silage. This was put through a thresh-



Stover made excellent bedding after a corn crop was clipped with forage harvester and put through thresher. [Guide photo]

ing machine which separated out the grain, blowing it up into the silo. The stalks were blown into a pile beside it. The process was so successful that the Smales soon stepped up their pace of harvesting by setting up a combine to receive the chopped corn at the silo too. The grain went into the silo at about 30 per cent moisture—just about right, according to Wilmer.

"Not only was the moisture right, but about one-third of the kernels were cracked too—which is just what is needed for high-moisture corn storage," Wilmer explained. The Smales handled about 55 acres of last year's 130-acre corn crop that way—and got about 6,000 bushels of corn from it.

The stover, which was blown into a rough heap, served as good bedding all winter. This saved the Smales the need to grow grain to get straw for bedding.—D.R.B. V



"They can argue all they want about creep-feeding, no creep is gonna feed MY calf."



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## Use of Silage Preservatives

**M**ANY farmers never use preservatives and put up good silage year after year, according to the National Silage Association. Others have found that preservatives may increase the chances of making a more agreeable silage, especially if the moisture content of the forage is 70 per cent or more when it goes into the silo.

There are two general types of silage preservatives: (1) chemicals and (2) feed additives. The different types perform different functions.

Preservation with chemicals relies on reducing bacterial action and fermentation by forming gas through chemical action. Examples of chemical preservatives are Bi-sulfite and Kylage. As water is required for proper action, these materials should be used in relatively high-moisture, green-chopped forages. They are not necessary in low moisture or wilted crops. Do not use excess amounts of chemicals as they will decrease palatability, and *keep out* of the silo when it is being filled. Always run the blower before entering the silo in order to remove danger of gas formation.

Feed additives, with the exception of molasses, (1) reduce the moisture content of high-moisture, green-chopped material making a more desirable environment for lactic and acetic acid-forming bacteria; (2) increase the readily available carbohydrate material for desirable bacteria to thrive on; (3) increase the feed value of the silage; and (4) reduce seepage thereby saving dry matter loss (seepage contains up to 14 per cent dry matter).

Crops are by no means similar in their need for preservatives. Crops with a high sugar content that readily convert into acids through fermentation *do not* need additives to prevent spoilage. These crops include: corn, millet, oats, barley and rye, cut when the grain is in the milk to dough stage.

Legumes and immature grasses (even in mixture with the crops named above) have a low sugar content and may need something that

will stimulate fermentation and thus increase the acidity.

Using a preservative does not always guarantee a good silage, but it will give you more leeway in silage operations. Anyone considering a preservative should figure the cost of the material in terms of total digestible nutrients added, as well as its preserving quality.—C.V.F. ✓

## Rust Checked by New Antibiotic

**C**EREAL rust has been held in check by an antibiotic in tests at the Winnipeg Research Station. Dr. W. A. Hagborg reports that wheat sprayed in the greenhouse with antibiotic P-9, one day after inoculation with rust, did not become infected. Infected plants sprayed in the field gave higher yields and their infection was reduced.

P-9 is taken into the plant sap and makes it resist new infection for several days. It also checks the rust fungus on recently infected plants. Both effects are important in field control because they reduce the number of applications required in a growing crop.

Derived from a streptomyces fungus, P-9 is not available commercially at present and it is not known whether it could be produced economically on a large scale. However, an effective spray would be valuable for temporary control of new races of rust until resistant varieties of cereals became available to growers. ✓

## Deal with Poison Ivy

**P**OISON ivy can be eradicated with one of several herbicides, says Dr. C. Whitehead of the Brandon Experimental Farm, Man. Brush killers (2,4-D plus 2,4,5-T), Silvex, Amitrole, or 2,4-D will do a satisfactory job at 1 tablespoonful of average commercial preparation in 1 gallon of water per 100 sq. ft.

Be sure to do a thorough job, covering every leaf with the chemical. When using 2,4-D, 2,4,5-T, or Silvex, take care to avoid spray drift onto trees, shrubs, or other ornamentals. Don't spray in a wind. ✓

## Kale as Late Grazing

**T**HERE'S good grazing during early August to mid-November if some kale is seeded in the spring, reports J. E. Shuh, Nova Scotia's director of field crops.

The crop responds well to high fertility and will outyield rape, with about 15 to 20 tons of green material per acre. Roughly speaking, and allowing for substantial loss through trampling, a stockman can reckon that 1 acre of well-grown kale will last 15 head of cattle for 1 month.

It's a mistake to throw open the gate and allow livestock to range freely over the whole crop area. Mr. Shuh recommends grazing restricted to a portion that can be consumed in a relatively short time. This can be done by moving an electric fence daily to provide fresh grazing, while leaving the already grazed area as a run-back with established grass.

More information on kale is available from Mr. Shuh at the Nova Scotia Agricultural College. ✓

## Switch Poor Grassland to Cereals

**W**HERE will the extra acres come from if cereal production is to be increased to meet our needs in the next 3 or 4 years? The answer



lies in a reduction of unproductive forage crop acreage, says O. G. Bratvold of the Alberta Department of Agriculture. He claims that there are far too many acres devoted to hay and pasture in relation to what is actually produced, especially in the western and northern parts of the province.

Bratvold recommends planting new stands of forage and breaking up the unproductive fields to use in future for cereal crops. With proper management, wise use of fertilizers, rotational grazing, etc., he believes the new stands can produce more hay and carry more animals on many less acres.

Present hay and pasture production must be maintained, but we can't afford to do this at the expense of large acreages of unproductive grassland, especially when there's the threat of a feed grain shortage. ✓

## A Look at Trash Cover



Ed Molberg of the Regina Experimental Farm points out what can happen to trash after tillage has been done with a one-way (left), as compared with the much heavier cover remaining after tillage with a Noble blade (right).

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## Half-Century on Fruit Ranch

*Good location, good water supply and good management have kept this business on top*

**F**RUIT ranchers of B.C.'s Okanagan Valley have known a series of ups and downs as pronounced as the topography of this sunny region. The key to survival has been their ability to adjust to changing conditions: new markets, new standards and new varieties.

One notable survivor is Greata Ranch, founded in the early days of the industry by a man of that name, and still going strong. Located on highway 97, about halfway between Peachland and Summerland, Greata (pronounced Gree-ta) is cut off from other orchards by miles of rock bluff and sage-covered slope. The eastern boundary is Okanagan Lake. To the west runs the highway, backed by a mountain covered with pine and fir. This isolation has been a factor in keeping the orchard free of insects and disease.

At present, the ranch is owned by Jack and George Long. About 50 years ago, their father, J. T. Long, came to the ranch as Mr. Greata's manager. Later, Mr. Long senior bought the place and ran it as a family enterprise. It's now operated by the brothers as a limited company, Greata Orchards Ltd. In an area where the average fruit farm is about 5 acres in size, Greata's 100 acres rate it as a major producer.

Like most of the larger fruit ranches, it was set up as a complete production unit with its own irrigation system, cold storage, and packing plant. The latter is located down at the lake on a wharf equipped with a railway slip for loading and unloading boxcars. Cars are shipped via scow to railway terminals at both ends of the lake.

**F**RUIT bearing the Greata trademark has been sold all over the world. Although improved road hauling facilities later replaced this barge service, the ranch still operated its own packing house right up to 1955—the year of the big frost.



A view of Greata ranch from Hwy. 97, between Peachland and Summerland.



Jack and George Long, the owners.

Greata fruit now goes to B.C. Fruit Shippers in Summerland, an independent packing house. But all Okanagan fruit is sold by B.C. Tree Fruits Ltd., an agency of the B.C. Fruit Growers' Association.

Because of high costs, the trend in the Valley has been toward a consolidation of fruit packing firms.

"Packaging and marketing have become so complicated it would be a business in itself to operate that end of it," Jack Long said. "In fact, I think packaging is overdone. It adds too much to the cost of fruit. Sometimes after a grower has paid the cost of having his apples packed in boxes they appear in city stores in plastic bags."

**A** SUCCESSFUL fruit ranch in the semi-arid Okanagan needs a steady supply of water. Irrigation water comes to Greata by flume from Deep Creek, which enters the lake about 3 miles north of the ranch. Water level is maintained in the creek by a line from Brenda Lake, 30 miles to the west. Springs provide domestic water for the ranch's three houses.

"If Mr. Greata hadn't had the foresight to obtain water rights for that lake, there wouldn't be a Greata Ranch today," George Long observed. The Longs have developed this water source by building a dam on the lake.

Another factor in Greata Ranch's success is good management. As

newer and more hardy varieties of fruit were developed, the Longs systematically used them to replace older trees. Newer varieties developed in the Okanagan have done much to hold markets which have become increasingly "choosy" year by year. Hardier strains have played their part, too, by making the orchards less vulnerable to unseasonable frosts.

Today, Greata Ranch produces cherries, peaches, pears and apples. In addition to the two Long brothers, it employs a permanent staff of 3, and a summer staff of about 20. One of the permanent men occupies an extra home on the ranch. The others live in Peachland, in houses also owned by Greata Ranch.

About 3 months after the apple harvest, the Longs begin to prune



Sprayer, operated by tractor's p.t.o., moving to orchards on narrow road.

their trees to prepare for next year's crop. Pruning goes on until March, the peach trees being the last to be done. After this, the trees are sprayed to take care of any pests that have managed to penetrate the wild land which surrounds Greata like a protective cloak.

It's care like this that keeps fruit quality high—a must for any grower if he wants to operate at a profit these days.—C.V.F.

### Kill Bugs, Not Customers

**A**RE fruits and vegetables completely safe to eat after they have been treated with insecticides? Professor Goble of the Ontario Agricultural College says that no material is allowed to be sold for use on any crop until it has been registered, and registration is not given without approval from the Food and Drug Directorate. The recommendations include the number of days that must elapse between treatment and harvest for safety.

Malathion and DDT provide examples. Neither of these is highly toxic, but malathion breaks down quickly on the plant and it can be used as close as 7 days from harvest, and even closer on some vegetables and fruits. DDT is very persistent, and a 30-day interval is required.

Professor Goble points out that if you follow provincial recommendations and the manufacturer's label for the number of days required, the

produce will be completely safe. If growers disregard the regulations and an unsafe amount of insecticide is found, they are liable to prosecution and the crop may be confiscated.

### Heap Good Fertilizer

**C**OMPOST, a wonderful fertilizer, is made quite easily from garden refuse, leaves, and domestic garbage. P. D. McCalla of the Alberta Department of Agriculture says the compost heap is usually oblong, not over 6 ft. wide, as long as desired, and rarely more than 5 ft. high.

Mr. McCalla recommends 4 to 6 inches of inverted sods, straw or other coarse material for the bottom of the heap. Then, if possible, spread 3 to 4 inches of manure on this layer. Add lawn clippings, leaves, or other vegetable refuse, and continue to alternate the layers of manure and plant materials. If not, dead leaves, lawn clippings, pea vines, and garbage make good compost if they are sprinkled with lime and a commercial fertilizer.

The compost pile should be flat or dished to collect rather than shed rain. It must be kept moist and also turned occasionally to hasten uniform decomposition. Good topsoil and a fertilizer (16-20-0, 10-30-10, or 27-14-0) help to speed up decomposition and improve the nutrient value. Calcium cyanamide is particularly valuable because it kills weed seeds and seedlings, and then breaks down to supply nitrogen for decomposition.

### Stop Rot with Rotation

**I**F the swede turnips are affected by black rot, soft rot, or blackleg, the best prevention is to rotate the crop. Prof. C. B. Kelly of the Ontario Agricultural College says that organisms causing these diseases tend to die out and will seldom cause trouble if turnips and related crops, such as kale, rape and cabbage, are not grown on the same land for 3 to 4 years.

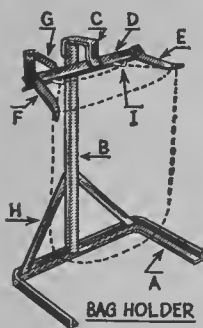
The soft rot organisms are more difficult to starve out because they attack a wider variety of crops, including mangel, beet, carrot, onion, lettuce and potato, as well as turnip and related members of the mustard family. Don't grow any of these for 4 years on the same field where soft rot has occurred.



# WORKSHOP

## Bag Holder

You can assemble a bag holder as follows: A (in sketch) is 61" length of  $\frac{1}{4}$ " by 1" angle-iron bent into a "u." B is 31" length of  $\frac{3}{4}$ " pipe welded to A. C is 9" length of  $\frac{1}{4}$ " by 1 $\frac{1}{2}$ " iron welded to top of pipe and holding D—a 15" length of  $\frac{3}{4}$ " by 1" angle-iron. Welded to D is E—a 10" length of  $\frac{1}{4}$ " by 1" flat iron, pointed at one end to hold the bag. F is 14" length of 1" flat iron, bent 4" from end at 45 degrees, and also pointed to hold bag. F is bolted at the bend to swivel on D, and a coil spring (G) runs from D to end of F to keep the bag tight. H consists of two 15" by 1" angle irons as braces. Finally, I is one of two 3 $\frac{1}{2}$ " nails bent as hooks and welded to D about 1" from each end to hang the bag on. —J.J.M., Man.

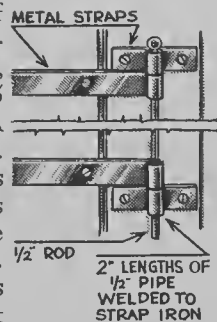


## Make Special Screws

It's easy to make thumb screws, eye bolts, small rod hangers and other special screws from round-head screws or stove bolts and washers. The washers are brazed into the screw or bolt slots for eye bolts or hangers, and a half-washer soldered into a screw head makes a thumb screw. For a sturdy screw or eye bolt, the washer should be sweated to the bottom of the slot and then reinforced with a smooth shoulder built up around the joint between the washer and the head.—E.O., Alta. ✓

## Homemade Hinges

To make hinges, I weld  $\frac{1}{2}$  in. by 2 in. pieces of pipe onto combine rub bars, about 12 to 15 ins. long. A length of  $\frac{1}{2}$  in. rod passes through the pipes and joins the hinges together. The sketch shows how simply it can be done. I used this design for a hog barn.—F.P., Sask.



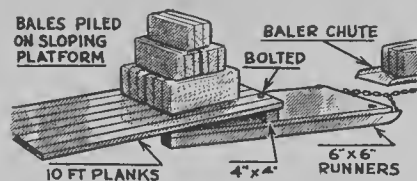
## Small Parts Cleaner

Don't throw away that old coffee percolator—it can make a dandy small parts cleaner. Simply adapt the sieve by forcing it down to the bottom of the stem and securing it with solder, which can be applied by heating the aluminum stem red hot and then rubbing on solder until set. Place small parts in the sieve inside the percolator or some other container partially filled with waste or dirty gasoline. Dunking and swishing the sieve will clean off dirt and

grease. When parts are clean, remove the sieve and let it drain. A perforated coffee or jam tin also makes a suitable "swisher and dunker."—E.O., Alta. ✓

## Bale Gatherer

Here's an idea for gathering and dumping bales of hay. I have a stone boat measuring 4 ft. by 9 ft., and consisting of 6 in. by 6 in. runners covered with 2 in. plank. I trail this behind the bailer. Attached to the stone boat is the dumping device. In my case I use an old door bolted onto a center 4 in. by 4 in. beam,



and extending 5 ft. behind the boat. But it could be made with some 10 ft. planks. Use three 7 in. bolts to attach the extension to the beam, four 5 in. bolts to attach the runners to the boat, and two 5 in. bolts to fix the hitch to the boat. A man stands on the front end of the stone boat and piles bales on the back end. When there are five bales, as shown in the sketch, they can be pushed off the back easily and are all ready to be picked up by the hay wagon.—M.B., Ont. ✓

## Neat Solder

A narrow band for long solder seams on sheet metal can be made if you draw borders along the line with a grease pencil or crayon. When the normal amount of solder should be used, it can be confined within the greased borders. Taping two crayons together, with a small wood block between to give the proper width, will enable you to mark both borders in one operation.—E.O., Alta. ✓

## Miniature Greenhouse

You can make a gallon jug into an individual greenhouse for a tender plant, but first you have to remove the bottom of the jug cleanly. Pour ordinary used or unused clean motor oil into the jug, up to the level where you want to make the cut. Take an iron rod that will pass through the neck of the jug and make it white hot. This can be done with a blow torch, furnace or forge. When the rod is hot enough, dip it into the oil, and be careful not to touch the glass with it. A tin



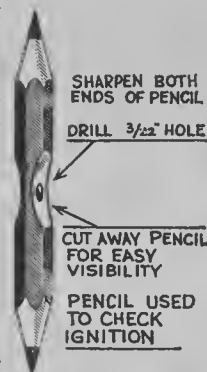
funnel in the neck of the jug will help. The heated rod will bring the oil to the boil quickly and, in a few seconds, the glass should crack cleanly at the oil level. If it doesn't crack, the oil is not hot enough and you will have to try again. Be careful of the hot oil, which can give you a severe burn.—R.A.M., Alta. ✓

## Brush Storage

To store a paint brush which you will use next day, and to avoid cleaning it, pour enough turpentine into a canning jar to cover the bristles. Place the brush in the jar and put the lid on tightly. —K.A., B.C. ✓

## Spark Plug Tester

Here's a handy trick. To make a tester for checking the firing of your spark plugs, cut off the eraser end of an ordinary pencil and sharpen the pencil at both ends. Next drill a  $\frac{3}{32}$  in. hole through the center of the pencil and cut away the wood slightly on each side of the hole. Place one end of the pencil lead against the plug and the other end on the motor block. The spark will jump across the hole in the pencil if the ignition is good. —M.E.B., P.E.I. ✓



## Gluing Round Stock

When we have broken round stock that needs to be glued together, we use adjustable water-hose clamps (automotive type). They can be used for sizes varying from  $\frac{3}{4}$  to 4 in. diameter. They apply even, overall pressure.—P.H., Alta. ✓

## Guide on Auger

Here's a simple way to back the truck in squarely for unloading with an auger. I marked the auger with three bands of white paint, each about 1 in. wide and 2 in. apart. Now, by looking in the rear-view mirror I can line up the truck on the auger every time by sighting along the truck box. The other box—the one we unload into—is made from a 4 ft. square plywood bottom with 10 in. sides.—F.P., Sask. ✓



## Slots in Metal

To speed up the job of making neat slots in thin sheet metal, fold the metal over a rounded wood block, such as a discarded piece of half-round if a small slot is required. Saw through the metal and wood with a hacksaw, while holding both of them in a vise or C-clamp. For wider slots, drill holes at the ends and then make two parallel cuts. After cuts are made, take the metal off the block and flatten it between two wood blocks or metal plates, or hammer it out with a flat hammer. —E.O., Alta. ✓



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## Safety with Saws



It pays to take care and to make the saw do a good job for you — safely.

If you take precautions when using a chain saw, you can extend the machine's life and, even more important, protect the operator. These 22 rules, compiled by Pioneer Saws, are worth noting:

1. Refuel the saw with a funnel and on bare earth.
2. If gas is spilled on the saw, wipe it off or let it evaporate before starting the motor.
3. Move the saw at least 10 ft. from fueling spot before starting it.
4. Never ask anyone to hold the saw while starting the motor.
5. Keep bystanders clear during operation.
6. Clear inflammable liquid away before cutting.
7. Let a hot saw cool before refueling.
8. Never cut until there's a clear place to work, a secure place to stand, and a safe exit from a falling tree.
9. Before starting the motor, examine the lean of the tree, look up for loose limbs or bark, and intertwined branches.
10. Wherever possible, place the pivot grip against the tree or log before cutting.
11. When undercutting have chain in an inverted position if possible.
12. Never operate a chain saw in a closed room on account of deadly exhaust fumes.
13. Never touch or try to stop a moving chain.
14. Make sure the saw is not touching anything before you start the motor.
15. Be relaxed but in full control when operating a chain saw.
16. Never carry your saw with the motor running while walking through bush. A branch or twig may open the throttle and make the chain revolve.

17. Never use the saw when the chain is dull or if repairs are needed.

18. Never attempt to sharpen or remove the chain while the motor is running.

19. Keep the muffler on the saw.

20. Keep the saw free of sawdust.

21. Keep the spark plug and wire connections tight.

22. Keep a filled fire extinguisher and a shovel handy. V

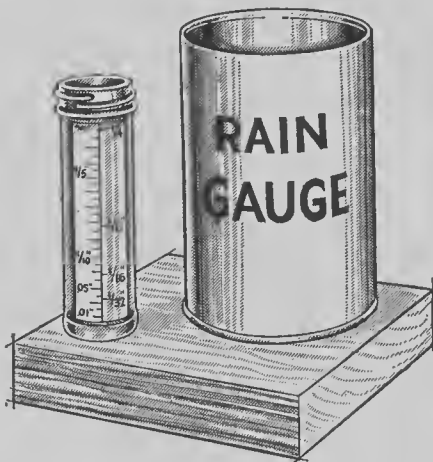
## Be Your Own Weatherman

### Can and Jar Measure Rain

HERE'S an easy way to make a rain gauge for collecting and measuring rainfall. It has been designed by the meteorological branch of the Canada Department of Transport.

All you'll need is a can, open at the top and with no lip, so that rain can be poured out of it easily; a small platform; a ruler; and a tall glass jar (olive jar, chili sauce bottle, seltzer bottle, etc.)

Make the platform, using a log or a box, for example. The open top of the can must be level and about 1 foot above the ground.



Calibrate the jar by pouring 1 inch of water into the can and transferring it to the tall jar, and marking the water level in the jar with a grease pencil or paint. This is the mark for 1 inch of rain. From this mark you can measure and mark up tenths of inches all the way to the top of the jar.

Place the rain gauge (can) as far as possible from buildings, trees, fences, etc., so that they won't interfere with the rain catch. Pour rain from the can into the calibrated jar, and read off the rainfall in inches and tenths. If there is any, read rainfall at least once a day, or better still, twice daily, at breakfast and supper times.

To measure snow, just stick a ruler into it at several points in the yard. Average the readings and distinguish between old and new snow. Ten inches of snow equal 1 inch of rain. V

## Homemade Manure Spreader

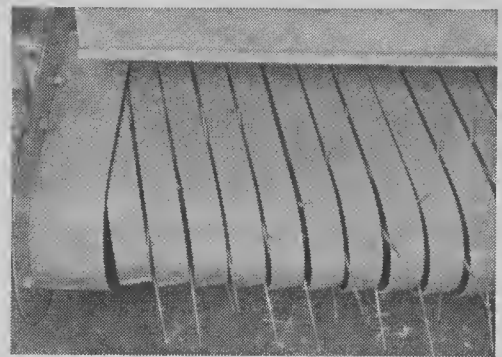


Ron Horrocks, of Horrocks Dairy Farm, Edmonton, is shown here with a manure spreader that was made from an old truck. "All my boys are good welders," says George Horrocks. "It's a handy thing to know on today's farms."

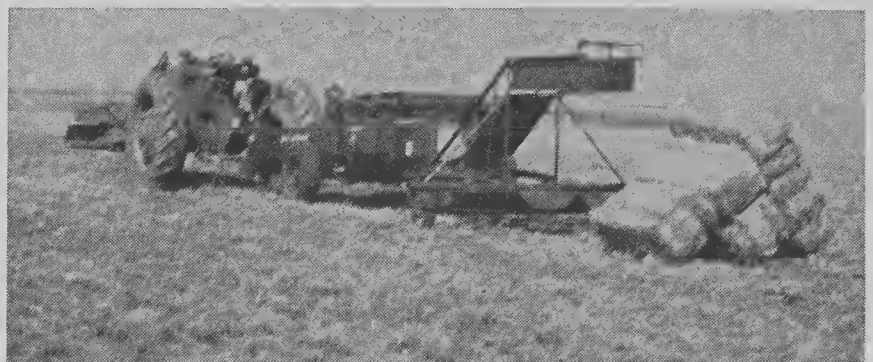


## Pickup Attachment

This combine pickup rakes on an angle instead of parallel to the windrow, and it is claimed to sweep the windrow clean. It also has an adjustable spring-balance feed and floating action to follow contours. The four rows of fingers are set in an auger pattern, and can be replaced individually. (Minn - Toba Industries Ltd.) (382) V



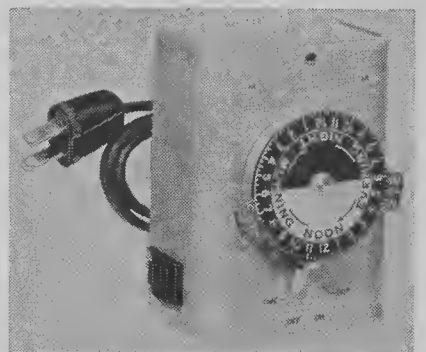
## Automatic Stooker



All lengths of bales can be made into 6-bale stooks and dumped at any rate of travel with this automatic stooker. The pyramid-type stooks shed rain, will not absorb ground moisture, and allow air to circulate through, under and around. (Prentice Manufacturing Ltd.) (383) V

## Time Control Unit

Known as the Robot, this control unit plugs into any 115-volt outlet and connects up with such items as lights, electric motors, stock tank heaters, engine heaters, refrigerators, room heaters, and any other appliances. It turns them on and off automatically at whatever times are selected, and does not need to be reset each time. (James B. Carter Ltd.) (384) V



For further information about any item mentioned in "What's New," write to WHAT'S NEW Department, The Country Guide, 1760 Ellice Ave., Winnipeg 21, Man., giving the key number shown at the end of each item, as—(17).



# FARM BUILDINGS

## Allow Air Past Windbreak

**W**INDBREAKS with openings in them offer more protection than solid ones. This is the conclusion reached at the University of Saskatchewan following tests made with the help of a National Research Council grant.

Prof. E. B. Moysey reports that 20 per cent "porosity" is desirable. This means, for example, that a cattle pen could be made of 8-in. boards with 2-in. spaces between them. The wind blows through the spaces, but it is calmer than if it tumbles over a solid wall, creating a general disturbance inside the pen that makes the area colder. So, if cattle are more than 3 ft. from a porous wall they are more sheltered—warmer—than if they were at any spot behind a non-porous barrier.

The same principle can be applied to reduce grain losses from farm trucks. With a simple, inexpensive windbreak fitted in front of the box, almost no grain blew away on a calm day until the truck's speed was 66 m.p.h. Without the windbreak, grain loss began at 35 m.p.h. The windbreak, basically one vertical and one slanted board, was considered more satisfactory and considerably less expensive than a tarpaulin.

With a headwind, the truck's speed would have to be reduced, but not as much as without a windbreak. Crosswinds are still a problem, but some of the trouble can be eased by putting short wings on the windbreak.

The porosity principle, says Professor Moysey, has been accepted for breakwaters. It also applies to the acoustic tile, which is punctured to break up sound and enable the material behind it to absorb the sound more easily. Trees have long been advocated as a kind of porous windbreak.

"Wind can't be stopped but it can be slowed down," says Professor Moysey. "And we've found that a porous windbreak is most effective in slowing it down."

Further information is available from the Department of Agricultural Engineering, College of Agriculture, Saskatoon. V

## Second Well Acts As Filter

**T**HERE'S a new type of filter for dugouts that can be serviced when the sand becomes clogged. It costs about \$50 more than the common type used at present.

The Saskatchewan Department of Agriculture reports that the new filter involves a second well, which is situated between the dugout and the well from which water is pumped for use. Water passes from the dugout to the first well through 1¼ in. plastic pipe. The bottom of the well, located close to the pumpwell and at the same depth, is covered with fine gravel, over which is 12 in. of coarse sand, covered with 24 in. of fine sand. Water flows from the pipe onto the sand, filtering through to the gravel beneath, and through the gravel to the pumpwell.

When servicing is needed, the intake pipe is raised from the water and the level of water is lowered by pumping until the filter sand is exposed. Then, the top 1 or 2 in. of clogged sand is replaced with clean sand, and the filter is ready for use.

It is advisable to install a dugout well that is sufficient to store about one-third of total daily filtered requirements. As a guide, the Saskatchewan engineers give daily filtered water needs as follows: 50 gallons for each family member, 15 per horse, 35 per dairy cow, 15 per beef animal, 4 per hog, 2 per sheep, 10 per 100 mature chickens, and 18 gallons per 100 mature turkeys. V

## A Slope Saves Power



Here's how a farm's topography can do some work. A feeder in the Frazer feedlot at High River, Alta., is under a cutbank. Grain (mostly barley) flows by gravity from the granary located on the bank down to the roller mill, and then it is augered from there to the self-feeder on the left.

## Pipes Replace Gate



If you're tired of opening gates to your feedlot or loafing area, you can try a type of cattle guard made from discarded pipes. These pipes can be lifted out easily, so that the area directly beneath them can be cleaned.

## Shelters Lower Costs

**P**RAIRIE livestock owners will find that shelters save on feed and reduce stresses on animals from sudden changes in temperature, humidity, atmospheric pressure, and wind, says E. A. Hess of the Lethbridge Research Station, Alta. He reports that animals moved from a warm to an even moderately cold

room began to shiver and breathe faster in a test at Lethbridge. Their heartbeat became faster too, and they consumed more feed and water.

Adjustments to winter weather require energy from a large amount of feed, which at a warmer temperature would be used for growth, fattening, or reproduction. Continued exposure to very low or rapidly changing temperatures also lowers an animal's resistance to disease. V

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**CHOOSE A CAREER WITH A PURPOSE**



# Auction

by WANDA LUTTRELL

Illustrated by JIM WALKER

"Never mind what I said," Mrs. Anders snapped at the auctioneer. "Nothin' here is for sale."

SARAH ANDERS stopped outside the yard gate and leaned on her cane. The November sun etched the branches of naked box-elders and walnuts across the early morning fog. On the cliff above the valley the same sun kindled the flames of orange maples and bright red oaks.

Frost crackled underfoot as she hobbled to the barn for what might be the last time. She stored within her the look of frosty diamonds flaunted brazenly by the weeds in the fence row and the noisy peace of the farm at half past six. She let the beauty sink deep inside her.

Lula Belle, the black Angus rogue, bellowed her rage at finding her hole in the fence mended. Jim's old beagles, Annie and Freckles, begged someone to take them hunting. A flock of tardy, southbound blackbirds chattered their anxiety.

Sarah shook her cane at them. They were just like the young folks, hurrying to the city or somewhere else as soon as they were old enough, always searching for sunnier pastures. If they had lived in this valley as long as she had, she thought, they wouldn't be so anxious to leave.

It wasn't really a matter of time, though. She had been a part of this valley ever since that autumn day she'd married Jim. She'd been twenty, when Jim brought her to the three-room cabin with its sanded floors and real glass windows. He'd built it himself in the middle of ninety acres of virgin soil and timber cradled in a curve of Whispering Creek.

As their family grew in number, Jim had added to the house until it sprawled every which way. Except for occasional trips to town and around

the neighborhood, she had never left it. It just wouldn't seem right waking up in one room and have nowhere else to go without being in somebody's way.

"Oh, Jim," she whispered, "how can I stand it, after all this room? What will I do for fields and trees and sky?"

Then she straightened her shoulders as much as they'd straighten and went about turning the cow in to her calf. She could almost hear Jim scolding gently, "Now, Sarie, don't make it hard on yourself. Time's is changed. It can't be helped."

By the time she had fed the chickens and the hogs and turned the cow back out, the sun was climbing, the frost nearly gone. "Oh, my, I must hurry," she thought. "It's close on to eight o'clock and they'll be here by ten. It's just that I can't go as fast as I used to." She really should be getting used to it by now, but the years had gone by so quickly.

Why, it seemed no time since little Jimmy and Alice, Meg and Johnny were home clamoring for bread and jelly or fighting over who would name the new calf. They were all grown now with families of their own, except Jimmy. She shook her head. Why, Meg even had grandchildren! It just didn't seem possible, and sometimes she forgot.

THE house looked cold in spite of the spiral of smoke that told her the fire was burning good in the Warm Morning stove in the kitchen. There was no life in it, no laughter or tears, no emotion of any kind to lend it warmth. There was loneliness and that was a cold feeling.

Even so, she loved the rambling, weather-boarded structure, from the dried-up climbing vine that sheltered the front porch in summer to the rusting crown of the roof. Many a sparrow had found shelter, many a child had spent happy hours under its eaves. But no one wanted an old house any more, or an old woman either.

Oh, she knew Johnny and Marie would be good to her, but she would be a burden. It wasn't fair to her daughter-in-law.

She didn't want to live with Meg in Kansas, either, or in Cincinnati with Alice. She wanted to stay right here in her own home with her own things around her. But she knew they worried about her way out here with the nearest neighbor half a mile or more away. And she did want to do what was best.

If she had to move, she'd rather go to Frankfort where she knew people. Now that Johnny was a senator (my, how proud Jim would be!) he couldn't manage the farm, too, even if he'd liked farming. Jimmy had been the child of the earth, and he lay buried in it somewhere in France.

Sarah Jane, Johnny's youngest child, had loved the house and the farm. She had come every summer as a child to stay as long as she could, sleeping in the big bed upstairs so she could hear the rain on the tin roof, wading the creek, roaming the fields and woods, a wild thing suddenly set free. They had been right to name her for her grandmother, for they were of the same root. If she had to live with any of them, Sarah would have preferred Sarah Jane. But she had a brand new husband and a life of her own. Sarah didn't want to intrude.

"How much better it would have been," she thought, "if I could have gone with Jim. But, no,



the good Lord knows what He's doing, even if it does seem all wrong to me."

She hung her cane on the peg by the back door. She could walk fine inside. It was just rough, uneven ground that made her lose her balance and go rolling about over the fields. That was one of the things that convinced the children she shouldn't stay alone any longer. As though she weren't capable of making her own decisions.

SHE stirred the fire and set about dusting the furniture, letting the unaccustomed vigor of her polishing speak an eloquent farewell to each scarred piece. She had decided days ago which she could keep. There wouldn't be room for many, only necessities, but it was like selling old friends, members of the family. She had only to look at them and memories crowded her mind.

The cherry corner cupboard, for instance. The week Jimmy was born she had lain in the big four poster in the front bedroom hearing the distant sounds of hammering and sawing, of Jim's happy, off-key whistling. Finally, she had crept into what was now the dining room and found the massive, natural-finished cupboard stretching from floor to ceiling, her wedding china sitting regally in its protective depths.

Most of it still sat there, the violets nodding on their delicate stems against the clear white china, bringing spring right inside the old farmhouse even in the dead of winter.

They went so well together, the fragile and the strong, Sarah and Jim, the china and the cupboard. How it would hurt to see them separated and sold. But the cupboard was too big to move. It would go with the house. Of course, the new owner would not want part of a set of cracked china, no matter if it was ringed with gold and flower-sprayed.

There was her mother's Boston rocker, the walnut buffet, the big round dining table, and the captain's chair that Jim always sat in, shoulders spread out above it like the branches of an oak, a mischievous grin lighting his gray eyes, turning his mouth up at the corners.

"Oh, Jim . . ." She brushed the thought aside unfinished. A car was growling across the creek and up the drive. Two more were descending from the main road.

Sarah patted her hair and turned around aimlessly. Here they were and she wasn't half ready. Oh, well, they'd just have to dust it off themselves, but she wanted to say good-

by to the rest of it. She hurried around the room where she had crowded most of the things for sale, laying her hand gently on each familiar shape.

The back door flew open and Sarah Jane rushed in, reminding Sarah of the crisp autumn air she brought with her. She grabbed Sarah and twirled her around.

"Granny! It's so good to see you!"

"I won't be 'Granny' long if you squeeze the life out of me," Sarah complained, but it felt good that someone cared enough to try. She wished Jim had lived to see this one grown. She was a beauty, with dark hair rippling to her shoulders and eyes "snappin' black." That's what Jim used to say about her eyes.

"Hello, Mrs. Anders." Sarah had forgotten Sarah Jane's young man until he spoke, a grin wide in his gray eyes and curving his mouth.

She remembered the first time she'd seen Jim. He had stood smiling just that way, the sun glinting on his sandy hair. "Howdy do, Miss Winston," he'd said, and the over six-foot bulk of him had filled her eyes and her heart.

THIS one wasn't so tall as Jim, not by three, four inches. His dark hair, what there was of it, stood straight up on his head instead of waving back over his forehead with one lock prone to falling in his eyes. But he was the same rugged, all-man type that Sarah knew could be so kind and gentle. "Leave it to Sarah Jane to get herself a man like Jim," she thought.

"This is Mark, Granny," Sarah Jane said, her pride showing plain. Sarah had been afraid someone had misnamed him, but Mark fit.

Then a thought struck her. "Did you come for some things, Sarah Jane?" she asked hopefully. "You see something you want, honey, you take it."

"No, Mrs. Anders." Mark was no longer grinning and his voice was deep and masterful. "Sarah Jane would like to have the big bed upstairs, the one she slept in when she was little, and some other things, but I'll buy what she decides she wants. If it doesn't cost too much," he added uncertainly.

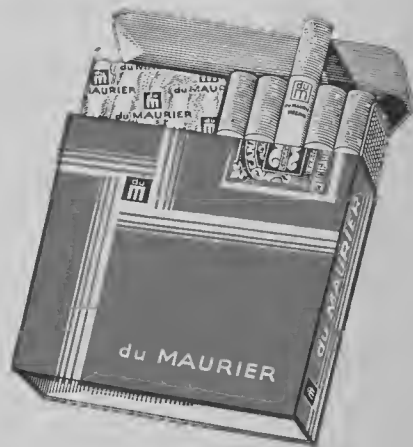
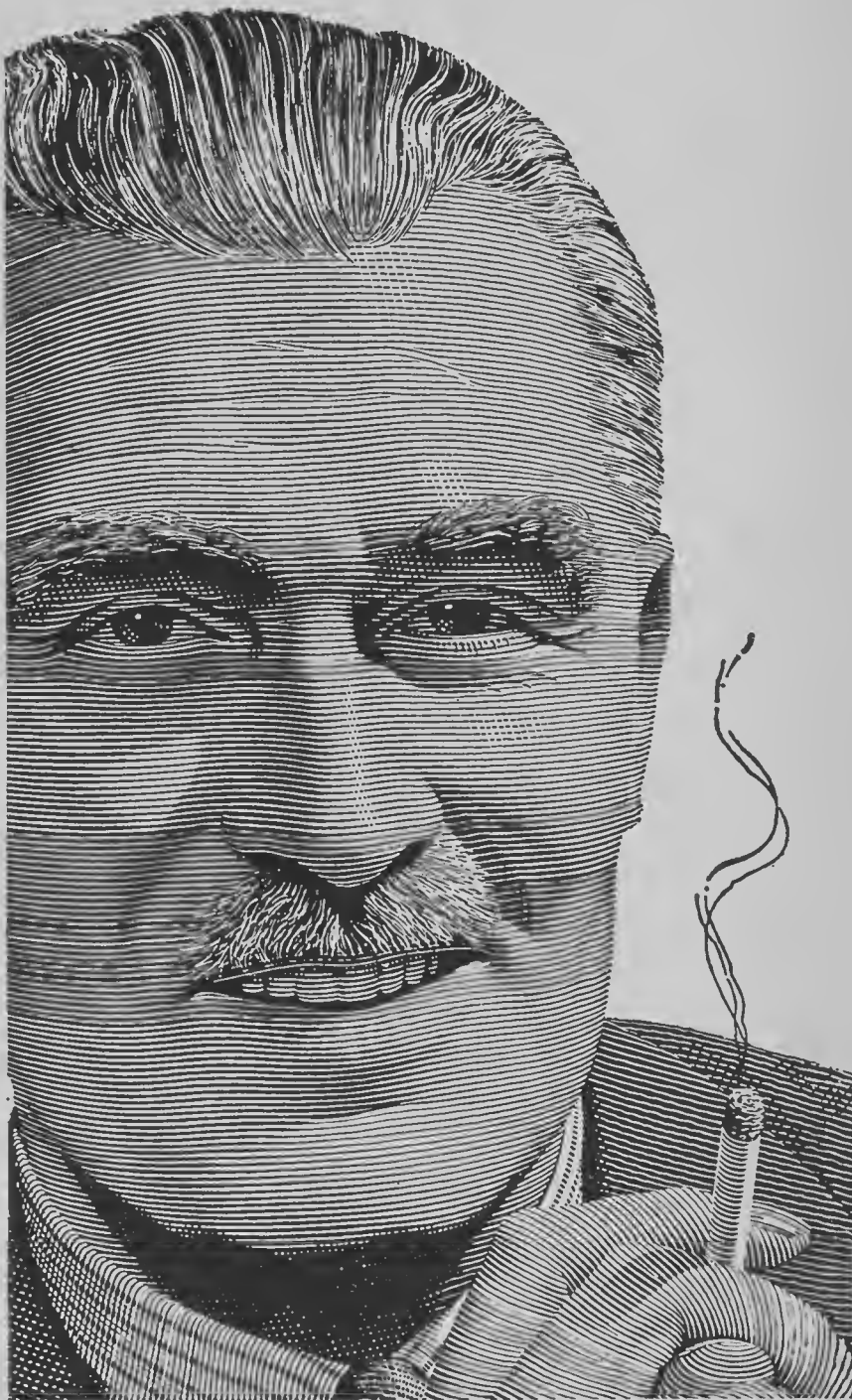
"He is like Jim!" Sarah thought happily. "But younger than Jim had been when she met him." If only . . . fiddlesticks! Someone was knocking at the front door. They wouldn't give a body time to think.

"I'll get it, Granny," Sarah Jane called, already halfway there. It did Sarah good to watch her quick, young movements. But what was she thinking just now? She turned around aimlessly.

"Can I do anything, Granny?" Mark asked, then his face reddened. "I mean, Mrs. Anders."

"Granny's fine," she corrected. "What's Sarah Jane's is yours, including her Granny." He smiled and Sarah was lost in the light of those gray eyes, remembering the day she'd married Jim and come to "The Heritage" as they had called the place. Jim would have been heartbroken to know that perhaps this very minute some stranger was preparing to buy it. It was to have been a heritage for the children she and

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Jim created, and none of them wanted it. She was almost glad Jim was gone. But he was practical. He would have understood that she could no longer manage ninety acres and a 10-room house alone. She brushed her hand over her eyes.

"Here, sit down a minute," Mark suggested. "It'll be over soon."

She sank down gratefully in Jim's chair. But Sarah Jane was coming back, chatting with the people who had come to look, to pry, and finally to try to buy a piece of Sarah's heart. It was all she could do to greet them civilly. They were like vultures, eager to prey on her dying home.

NO, not all of them. There was Lizzie MacAllister who hadn't a penny to call her own. Lizzie, bless her, had not come to buy, but to pay her last respects. The times she had been in and out of this house! Sarah knew it would be almost as hard for Lizzie as it was for her. And there were others.

Young Billy Mackey stood near the door, his eyes focused far off on a sadness of his own, his hand resting lovingly on the satin-smooth walnut stock of Jim's old 12-gauge. Sarah knew he was not coveting, could not buy it if he had the money. There were too many repairs to be made, too many fatherless mouths to be fed on the Mackey farm. But the part of Jim that he knew best was tied up in that gun and the dogs. She could tell by the muddy tracks on his blue jeans that Billy had already been out to the dog pen.

She hadn't seen Billy to talk to in a long while, though her woodbox had been kept mysteriously full last winter. She understood. Sitting by the open fire on winter evenings, the silence broken only by the crackling fire and the wind outside, she missed the faint squeak of rag on metal, the soft rubbing, the scent of oil. Jim had taken such pains to teach the boy how to handle the dogs and the gun, making his eyes widen with

the excitement of the chase. "'Twas back in the winter of . . ." She understood.

EVERY nook and corner of this house held a memory, a part of Jim. Would she be able to see him clearly once she'd sold his chair, his gun, their home? Would her link with her mother vanish with the rocker and other memories with other keepsakes?

"I can't stand it!" Sarah thought wildly. But the auctioneer was ready to begin, his hand already eagerly clutching the back of the rocking chair.

"What am I bid for this lovely old Boston rocker?" she heard him say. Oh, not mother's rocker first! Her heart cried out. But what difference did it make? First or last, it had to go. Oh, Jim . . .

"Can I get you something, Granny?" Sarah Jane whispered. "You look faint."

Sarah shook her head. "I'm all right, child," she said, patting the smooth hand with her gnarled one. Of course, I'm all right, her mind scolded. I stood it when Jimmy was killed, didn't I? But Jim was here then, her heart argued back.

No matter. I got through Jim's burying alone, and I can put away my home and way of life. But she hadn't sold Jim or Jimmy. The good Lord had called them and she hadn't had the worry of thinking they might be unloved or neglected. So that was what was bothering her so much! These things were going to the highest bidder.

"Going oncel!" The auctioneer brought his gavel down with a bang. Oh, no. The rocker was going to that sour Sissie Henderson who'd never have a chick nor a child to rock in it. And there was poor old Lizzie MacAllister sniffing into her handkerchief as the auctioneer held his gavel ready to seal its doom.

My, how Lizzie loved that rocker,

Sarah remembered. No sooner than she was in the door, she made straight for that chair, and she'd sit there all afternoon rocking to beat the band, telling all the latest gossip, bragging about her newest grandchild.

"Wait!" Sarah didn't realize she had cried aloud until every eye in the room turned toward her. Too late to sit back and pretend she hadn't spoken. She felt her cheeks grow hot, but she had made up her mind. She sat there, as straight as her eighty-odd years would permit. "That chair's not for sale," she said clearly.

"But Miz Anders," the auctioneer began, "you said . . ."

"Never mind what I said!" she snapped. "Nothin' here's for sale."

She heard the gasps and saw the puzzled looks. No doubt some of them were thinking she'd lost her senses. Sarah Jane's eyes held a worried look.

"I . . . I've changed my mind," she added more gently.

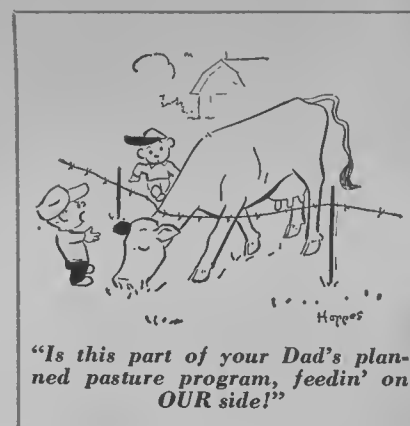
"Well, I never!" Sarah controlled an urge to laugh at the outrage on Sissie Henderson's face.

"That's a lady's privilege," Mark grinned, his gray eyes dancing.

"But, Granny . . ." Sarah Jane whispered.

"Hush, child," Sarah hissed. She turned to the crowd. "These things have already been bid for," she explained. "Oh, not in dollars and cents," she hastened to add, seeing the baleful glances she was getting. "But down through the years certain people have come here in friendship and loved these things right along with Jim and me." Her eyes met Lizzie's. "That rocker needs grandbabies to rock, Lizzie," she said. "I want you to have it."

Sarah turned from the pleased surprise in the woman's eyes. "Annie and Freckles have been wantin' to go huntin' something awful, Billy," she told the fourteen-year-old. "Do



"Is this part of your Dad's planned pasture program, feedin' on OUR side!"

you think you could tend to a 12-gauge shotgun and a couple of dogs?" She saw that the boy was about to lose his battle against the sudden moisture in his eyes as he picked up the gun and cradled it gently in the crook of his arm. "Well, what are you waitin' for? Take 'em home, boy," she said, a little gruffly because of the lump in her own throat.

Sarah Jane could use some of the things, she thought, and Mark was the one to have Jim's chair. The other children would want a piece or two.

"Hank, there's a plow out in the barn you've always admired. Jim would like to know it wasn't left to rust. Mary, I know you didn't want pay for bringing us hot suppers during Jim's illness, but who has a better right to this buffet?"

SARAH passed through the crowd, passing out a dish or a mirror here, a piece of furniture there. It was good to know that though her home was vanishing piece by piece, she was passing on its best to those who would cherish them. Even if she could keep the things the rest of her life, she couldn't take them with her when she went to join Jim.

And it wasn't as though her memories were locked up in the buffet drawer or hidden under the quilts in the bottom of the cedar chest. They were tucked away inside where she could take them out and visit with them whenever she took a notion. Even the farm had a little corner all its own that no deed transfer could touch.

Suddenly she remembered! She was supposed to sell the farm! But the auctioneer and most of the people had already gone. Some of the cars had reached the main road.

She hurried in search of Mark. He'd have to stop them, call them back. Where was that boy? Then, through the kitchen window, she saw them. Sarah Jane was leaning on the gate, obviously saying a difficult farewell to this place that she, like Sarah, loved above all others. It was plain in her face.

Mark stood a little behind her, his eyes feasting on the lush greenness that marked the winding path of the creek through the valley, the glowing color of the encircling hills. How often had she seen that same look of contentment and awe combined on Jim's face?

But it was the way Mark stood, feet spread wide apart and planted solidly as though they would take root there in the rich, brown soil, that made hope spring up anew in Sarah's heart.

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# Home and Family

The Country Guide's Magazine for Farm Women



[National Film Board photo]

## 95 Candles for Canada

*Dear, most justly dear to every land beneath the sun are the children born in her bosom, and nursed upon her breast; but when the man of another country, wherever born, speaking whatever speech, holding whatever creed, seeks out a country to serve and honor and cleave to in weal or in woe—when he heaves up the anchor of his heart from its old moorings, and lays at the feet of the mistress of his choice, his New country, all the hopes of his ripe manhood, he establishes by such devotion a claim to consideration, not second even to that of the children of the soil.—*  
Thomas D'Arcy McGee, 1862.

**A** BIRTHDAY is a happy time, and cause for celebration in any family. This month the Canadian family marks the 95th anniversary of Confederation, the joining together of first-settled provinces upon which our nation was founded. It's Canada's birthday.

Few Canadians today can recall in personal memory the nation's birth. At 95, a man is old; a nation is young. But if few can remember the nation's beginning or the whole of its developing years, each citizen has shared some of them and has experienced some part of the continuing change that is development.

A nation has its meaning in the experience of its citizens within its boundaries. Since this national birthday comes in the first days of summer, perhaps it will prompt you to reincarnate the frontier wanderers' curiosity. Perhaps this summer you and your share of the Canadian family can broaden your experience within

the country's boundary. Can you visit a county, a province, a historic site, a legislative or parliament building, or some aspect of the Canadian scene which you have not visited before? Perhaps you will add another dimension to your familiarity with the country itself and to your acquaintance within the larger Canadian family.

See the reddened sands and sprawling beaches of the Island province which was cradle for Confederation. Gaze upon the towering magnificence of snow-crowned mountain peaks. Read the letters on ships from many lands which dock in harbors on two oceans. And in the nation which extends "from sea to sea," look about, camp in her parks and fish in her fresh waters. Regard the work of Canadian hands and the products of Canadian minds.

Won't you light a candle for Canada?—G.L.

v

# Firm Foundations Have a Fashion Function

by **ELVA FLETCHER**  
Home Editor



[Butterick photo]

You will find no feeling of constriction in the undercover fashions that are properly fitted.

## Some points to remember:

- ✓ Try foundation garments on before you buy
- ✓ Proper fit is important for appearance and comfort
- ✓ If the services of a professional fitter are not available, take your own measurements at home before you shop

**N**OT all of us are gifted with perfect figure proportions. Yet we can do much to make the best of our body proportions by wise selection of undercover fashions. Proper fit is important both for appearance and comfort. Well-selected foundation garments support muscle tissue; they supplement muscles which have lost tone; and, by encouraging correct posture and proper breathing, they help to minimize fatigue. If you don't have the services of a professional fitter when you shop, take your own measurements at home to help you with your selection.

### WHICH BRA SHALL I BUY?

Brassieres come in three basic types. The first is the bandeau which has a narrow band, or no band at all, beneath the cups. Secondly, there is the long line bra. It has a band beneath the cups which often extends to the waist. The third type is the strapless bra. And you'll find many variations of all three.

For example, all of them are available in contour and padded styles. The contour bra has a thin foam lining in the cup for extra shaping. Some have extra low backs, others have elastic inserts for greater comfort. Some offer circular stitched cups for extra support and shaping. Strapless bras, of course, are specially designed for low-cut necklines and the ones offering the best fit usually extend to the waist.

A good brassiere should be firm but never squeeze. It should lift and support breasts to the natural bustline. It can only achieve this if it is well-fitted. And this is the reason you should be sure to get the size and fitting that is best suited to your figure.

To determine your bra size, measure around your diaphragm (under the bust.) Then add 6 inches. For example, if you measure 26 inches, try a 32 bra. If the total comes out to an odd number, take the next largest size.

The cup size depends on your figure and the development of your bust. To know your correct cup size measure at the fullest point of the bust line. If this measures the same as the bra size, take an A cup. If it measures 1 inch more, take a B cup; if 2 inches more, a C cup; and 3 inches more, a D cup. C or D fittings need good, firm straps. For the best fit they should be a double thickness of  $\frac{3}{4}$  or 1-inch ribbon for everyday wear. Otherwise, stitch some wider ribbon under the original strapping.

To put a bra on properly, bend over slightly and allow the bust to fall gently into the cups. Hook the back, pull down firmly in the back, then adjust shoulder straps. Use the same method for a bra with a front closing.

### GIRDLE STYLES

There are three basic styles in girdles. There's the simple, roll-on type made of lightweight elastic for gentle support; others have strong front, back or side panels for firmer control; still others have rigid panels and boning for maximum support.

The all-elastic girdle without panels gives least control. However this control will vary with fabric and construction. As more panels and seams are added, the garment will give even more control.

For proper fitting of girdles there are three important measurements: waist, hips, and length from waist to thigh. Girdles should be long enough to stay down with body movement and to mold the body without bulges. The waist should fit smoothly, any boning should curve with the body.

If you measure 14 inches or less from waist to thigh, it's a short girdle for you. If you measure between 15 and 16 inches, a medium length; and if you are 17 inches or more, you would be well advised to get a longer length. The full-hipped figure needs a longer girdle.

If you are buying a girdle, measure the difference between waist and hips. If the difference is less than 8 inches, try the girdle designed for the junior figure; if the difference ranges between 8 and 11 inches you'll need a garment designed for the average figure. If the difference is over 11 inches, then you need the one made for the full

figure. It follows that the short woman with the full figure needs a longer girdle than the tall woman.

Unless you have the average 10-inch difference between waist and hips it's unwise to buy a girdle by waist measurement only. For example, if you have a 26-inch waist and a 40-inch hip try the girdle with the 28-inch waist. Dart the excess on either side of the back panel or on each side panel. Don't make the waist darts at the front. It may not be a morale booster but at least you will have a comfortable garment. And you can always try the RCAF's XBX exercise plan and regiment your diet.

If you are considering a panty girdle, be sure it is not too short. And be equally certain that it is not too tight at the base of the legs.

There's a right way and a wrong way to put your girdle on. This is the right way: fold it in half by turning the top toward the bottom. Step into it and pull to wearing position on the hips. Then roll the top into place. Be sure the center front of the girdle centers the body.

### THE ALL-IN-ONE

Many women like the corselette because it gives all-in-one figure control. This type of garment does require careful shopping because it must fit properly for best results. They're sized by bust measurement in a range from 32 to 52 inches. The distance from underarm to waist is extremely important to good fit; and bust cups need to be deep enough. There should be no wrinkling at the front panel and any boning should curve comfortably and not "dig" in. It needs to be sufficiently long so that it won't ride up when you are sitting or bending.

Corselettes are made for all three figure types: pull-on styles, mostly made of elastic, for junior figures; garments with stitched or reinforced bra cups, boning, non-stretch panels alternating with elastic for the average figure; and garments with front and back boning, special control features and zipper closures for the full figure. Actually a good girdle and bra combination serves the same purpose and is much easier to find and fit.

### FABRIC COUNTS TOO

What about fabric? Foundations come in a variety of fabric, each of them with its own characteristic. Often they are blends of one or more fibers.

Cotton is commonly used. The reason: it's absorbent, comfortable to wear, and easy to launder. It comes in a wide range—from lightweight to firm.

Synthetic fibers such as nylon, dacron, orlon are frequently used. They have much in their favor: they're strong, lightweight; wrinkle-resistant; dry quickly; and keep their shape. They're often blended with cotton for durability.

For resiliency many elasticized fabrics use rayon fibers. Acetates (usually in satin weaves) look both lustrous and luxurious.

Rubber makes the core of elastic yarns and, of course, you also find it in molded rubber girdles.

Lastex, the trade name for elasticized yarn, may have either a rubber or spandex fiber core. It, too, is lightweight and gives varying control depending on the firmness of the weave.

The bright new star in the foundation world is the spandex fiber. This fiber is lighter in weight than all others and highly elastic. So far it is best suited to the figure which is firm and so does not need too much control. One point in its favor is that it takes to machine washing. It's sold under the trade names of lycra and vyrene.

You will also find garments of textured fabrics. Apart from being stretchier they are very soft and more absorbent than non-textured synthetics. Because of their gentle control you will find them most frequently in maternity garments and teenage girdles.

The correct selection is important because foundation garments have both a health and a fashion function. You will agree once you use your full-length mirror as a crystal ball to forecast the shape of things to come!



# For Easier Ironing

**I**RONING is one of the least-liked among household chores. One factor is the fatigue which results from boredom and from standing in one position for a prolonged time.

To make your ironing job easier, introduce some variety by testing different ironing methods to find the one which gives you the most efficient results with the least effort.

Rhythm is the secret to easier ironing. Move the iron in rhythmic strokes up and down the board. A lengthwise stroke takes less energy because it covers more distance before it must be reversed. Short and crosswise strokes, and ironing in all directions is wasteful of energy. Music from a radio or record player will help you develop rhythmic strokes and help combat boredom.

The height of the ironing board is very important. To prevent fatigue, it should be comfortable for you personally. Adjustable-height ironing boards are more expensive but may be well worthwhile if your physique varies from average. When buying a new ironing board, choose one with a perforated metal surface that allows steam to penetrate the material and escape through the board. This makes your task cooler and permits the material to dry faster. Look for a board with legs set well back into the center so that garments such as slim skirts can be ironed easily.

A foam or felt pad beneath the ironing board cover provides a good

ironing surface. It may be separate or attached to the cover. Silicone ironing board covers are a good choice because they do not scorch and can be easily wiped clean with a damp cloth.

If it is comfortable to you, sit down to iron. Choose a high stool with a foot rest and back support. If you prefer to stand, wear comfortable shoes and stand on a foam rubber pad.

**M**ILDEW is a hazard to clothing which has been dampened for ironing. A mold that discolors and rots clothing, household textiles and leather, mildew thrives under damp, dark, warm conditions. Clothing which has been dampened but not ironed should be shaken out and hung up to dry. Small amounts may be wrapped tightly and held in the refrigerator until they can be ironed.

Treat mildew spots as soon as you discover them. Brush any surface growth off the material outdoors to prevent the spores from spreading inside the house; then air the fabric thoroughly. Further treatment depends on the fiber content of the material and the age of the mold.

Washable materials should be washed immediately in soap and water, rinsed well and dried in the sun. If the stain remains on a colored fabric, moisten it with lemon juice and salt mixture and spread in the sun to bleach. Rinse again and dry. For spots on white washable mate-

rial, dampen the stain with water and dust with powdered sodium perborate or dip the affected area in a mixture of one teaspoon sodium perborate to one pint of warm water. Let the bleach work a minute or two, then rinse well.

To treat old stains on linen, cotton or rayon, dip the material into a chlorine bleach for just one minute; then dip it immediately into a weak vinegar solution to stop the chlorine action. Rinse thoroughly with water. Do not use this method on wool or silk. ✓

## Sock Hints

An old sock can be used to cover the top end of an outdoor ladder to cushion it. This will keep the ladder from sliding against the exterior of the house, and prevent unsightly marks on the painted surface.

Slip a pair of worn-out old socks on your hands when cleaning venetian blinds. Dust with both hands. You can work easily around the tapes, into the corners of the slats, and make a quick job of it.

Children's socks wear much longer if they are darned on the bias. Darning on the bias allows the darn to give during walking.

You can keep the upholstery in the car much cleaner if you slip a pair of socks over baby's shoes before putting him in his car seat. ✓

## Bread Basket

**M**ANY homemakers have the long, narrow bread baskets used to serve French bread. Since most of us have French bread only occasionally, why not use these attractive baskets for other things in between times?

For example, you can add color to your dining room table by using the basket for fruit-in-season; this

### For Fruit...



way the fruit is ready for the family as dessert. Or put a chicken feeder filled with water inside the basket and add green plants inserted in pin-point holders. Greens treated this way will stay fresh for days. Chicken feeders are available from most dime and variety stores and make excellent inserts for these baskets.

### ...For Flowers



When French bread is on the menu, it's a simple matter to remove fruit or flowers and use your basket for its basic purpose.—L.P.B. ✓

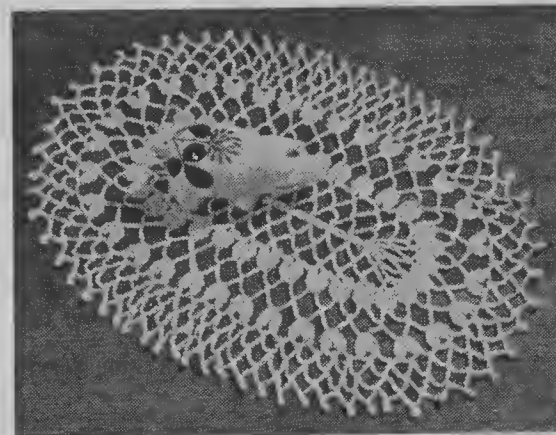
## HANDICRAFTS

### DOILIES

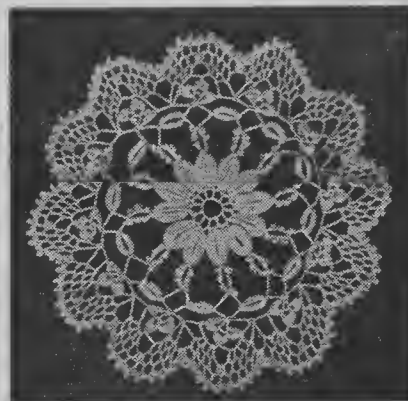
Crisp crocheted circles look fresh under sparkling crystal. They provide an absorbent and silencing base for the stemware. These doilies measure about 6 in. in diameter; a No. 12 hook is used. For directions order Leaflet No. C-7572; 10¢.



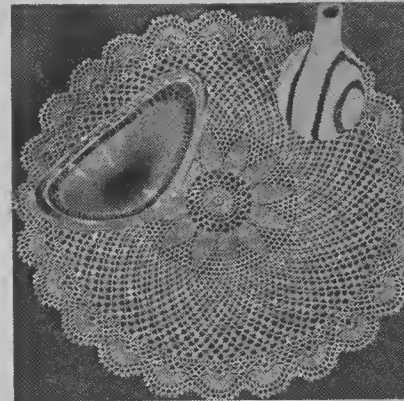
The oval doily crocheted from instructions on Leaflet No. PC-3385 measures 6 by 9 in. when finished. A No. 9 crochet hook is used. Leaflet price 10¢.



This lacy, open design doily adorns a table top while protecting it from surface scratches. The finished doily diameter measures 17 in. It is worked with a No. 10 crochet hook. For instructions, order Leaflet No. PC-4103. Please send 10¢.



This small doily, measuring 7½ in. in diameter, suggests many, varied uses. It is crocheted with a No. 10 hook from Leaflet No. PC-6250; 10¢.



Ripple Rhythm, the doily shown above, measures 14 in. in diameter. It is crocheted with a No. 10 hook from Leaflet No. CS-749; 10¢.

For handicraft patterns pictured above please address your order to The Country Guide Needlework Dept., 1760 Ellice Ave., Winnipeg 21, Man.





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T-59

# Swimming Pool = Summer Fun

by MARY AKSIM



Hot summer day? That's when a farm family can appreciate a swim pool.

**H**OW would you like to cool off in your own swimming pool after a scorching day in the field? A swimming pool has given our country home almost all the advantages of a summer cottage. There are added dividends: privacy, convenience, and, of course, no driving in week end traffic!

We chose a swimming pool do-it-yourself kit. It gave us a pool 16' by 32', 4' deep at the shallow end, with a hopper at the deep end 7½' deep to allow for shallow dives. These kits cost from \$700 to \$1,500, depending on the depth of the pool desired. There are often sizeable reductions on kit prices in out-of-season sales. We decided to put the pool in a spot where an evergreen hedge had grown high around an abandoned vegetable garden. If you like a lot of sun, you might prefer a less shady location.

A backloader dug the excavation. We hit solid rock at the deep end of the pool and were held up more than a week dynamiting. See that barbecue grill in the photograph? The two stones which form it were removed from the pool bed, along with enough flags to frame the pool when completed!

Once the excavation was complete, the prefabricated 16' by 8' cedar walls were set up and bolted into place; the floor was leveled and packed with washed sand. (About a week's work by the family and a neighboring farmer.) Next, the plastic lining was stretched into place and stapled along the top of the walls, and the pre-cut coping boards were pegged to the top of the wall to keep it smooth. We found the best way to stretch the liner was to run about 3 inches of water into it as the sides were stretched loosely into place.

**T**HE pump from the kit filter system pumps water through the garden hose from a well we weren't using. To our surprise this well supplied the 15,000 gallons needed to fill the pool. The job of backfilling around the walls took us most of the rest of the summer. We used the extra earth to top a renovated roothouse.

The filter system came with our kit, but one may be bought separately. We hid it behind evergreens and sheltered it with a 4' by 4' roof on 4" by 4"s for protection. The system consists of a tank in which

Bolivian filter sands, ranging from coarse at the bottom to fine at the top, filter the pool water which enters at the top of the tank. The pool is fitted with an intake valve and an outlet, attached to the filter tank by plastic hose. The filter operates on a ½ h.p. motor.

We find the care of the filter quite simple. Once a week the flow of water is reversed, and the tank backwashed. About once a year we clean the tank by running suds from a cup of detergent through it.

**T**HAT first summer we didn't even install a pool ladder. Just swam and backfilled. The following spring we laid the flagstone around the pool. We find it is cleaner than sand and easier on plastic liners! We planted shrubs and grass seed. By swimming time we had a 3-rung ladder, made by a plumber out of 1¼" pipe, painted with silver rust-resistant paint. We also had a diving board, 12' by 12" by 2" oak, covered with coco matting, anchored at the low end with a metal hasp attached to a cement footing by bolts. The board rests on a 4" x 4" cedar block to give it spring. All this for a total of \$12.

This year we added a vacuum cleaner—another \$12. It runs on the pressure of a garden hose and retrieves sand and other particles.

Upkeep of the pool? Negligible. About \$30 a season for a chlorine compound used daily, \$2 for a one-shot chemical treatment, and whatever the addition of a ½ h.p. motor means to the electric bill.

We drained our pool the first spring because we hadn't kept the fallen leaves cleaned out the fall before. Never again! Now we diligently skim the leaves until a covering of ice has formed. It needs no other protection for the winter, we find, although a plastic cover would keep the leaves out. The plastic lining allows freezing without splitting.

We're glad our vote went for a pool 4 years ago. So are the friends and neighbors who have enjoyed the pool with us on hot days.



This tank is part of the pool's filter system. Intake and outlet pipes are at the bottom; the wastepipe for backwashing attached to the top.



Outsized stones retrieved from the pool bed made a family sized barbecue.

# Costumes for Class



2362

No. 2362. Just 3 pieces mix and match in 6 costumes for the sub-teen student. The button-front blouse features a Bermuda collar, roll-up sleeves. Waist-length vest is sleeveless, with shallow neck and double-breasted button effect. Box pleats in the side-zipped skirt are stitched down part way. Sub-teen sizes 8s, 10s, 12s, 14s. Pattern price 60¢.

No. 2427. A fringe trims the side front closing of the classic kilt. Tab trim at back hip. An alternate semi-full, gored style is included. Young Jr. waist sizes 23½", 25½"; Teen 24", 25", 26", 28". Price 50¢.



2427

No. 2357. Contrasting braid trims a sleeveless, scoop-necked jumper with button front and self-tie belt. Gathered skirt, short-sleeved, high-necked dress included. Young Jr. 9, 11, 13; Teen 10, 12, 14, 16; 50¢.



2357



2444

No. 2444. This trimly tailored girls' jumper features top-stitching and back zipper. Patch pockets optional. A neckline bow trims the back-buttoned, ¾ sleeved blouse. Girls' sizes 7, 8, 10, 12, 14; 50¢.

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Present summer salad foods in sparkling

## Jellied Salads

THE cool smoothness of gelatin makes it a dandy base for summer salads. The recipes below are our salute to National Salad Month: one tangy tomato appetizer or side salad; two heartier main course salads; and one dessert salad jewelled with the season's fruits.

Perhaps you will find these suggestions helpful.

- Chill gelatin until slightly thickened (the consistency of unbeaten egg white) before adding the solid ingredients. Carefully fold in well drained fruit or vegetables, distributing them evenly.

- For easier unmolding, oil the mold or rinse it with cold water before spooning in the gelatin mixture.

- To make a definite pattern with fruit or vegetables, arrange in a thin layer of thickened gelatin. Chill until firm, then add remaining gelatin.

- In making layered salads, be sure that each layer is firm before adding the next one.

- Prepare large jellied salads a day ahead of serving, so they will set thoroughly.

- Fill molds as full as possible for easy unmolding.

- To unmold, loosen edge with a spatula or a small knife dipped in warm water. Then quickly immerse the mold just to the top in lukewarm water (hot water will melt the gelatin). Shake mold to loosen. Place serving dish over top, invert, and carefully lift off mold.

- Moisten the surface of large gelatin molds and the serving plate before turning out as directed above. When the two surfaces are wet, it's easy to center the gelatin on the plate. Remove excess moisture with a towel.

### Jellied Tomato Ring

- |                            |                           |
|----------------------------|---------------------------|
| 1 pkg. tomato soup mix     | 1 small bay leaf          |
| 2 c. water                 | 2 whole cloves            |
| 2½ T. chopped onion        | 4 tsp. unflavored gelatin |
| 2 T. chopped celery leaves | ½ c. cold water           |
| 1 T. brown sugar           | 2 T. lemon juice          |
| ½ tsp. salt                | ½ c. finely diced celery  |

Stir soup mix into the 2 cups water. Add onion, celery leaves, brown sugar, salt, bay leaf, and cloves. Bring to a boil and simmer 10 min., stirring occasionally. Strain through a fine sieve. Soften gelatin in the ½ cup cold water. When softened, stir it and lemon juice into soup mixture. Chill until partially set. Add celery. Pour into an oiled quart mold and chill until firm. Unmold on a serving plate and garnish with greens. Serve with Creamy Cucumber Sauce.

### Creamy Cucumber Sauce

- |                              |                         |
|------------------------------|-------------------------|
| ½ pt. sour cream             | 1 tsp. sugar            |
| ¼ c. finely chopped cucumber | ¼ tsp. salt             |
| 2 tsp. lemon juice           | ¼ tsp. prepared mustard |
| 1½ tsp. chopped parsley      | ¼ tsp. horseradish      |

Combine all ingredients. Chill and serve with Jellied Tomato Ring.

### Lemon Chicken Mold

- |                             |                                  |
|-----------------------------|----------------------------------|
| 1 chicken bouillon cube     | ¼ c. finely chopped celery       |
| 1 c. boiling water          | ¼ c. finely chopped onion        |
| 1 pkg. unflavored gelatin   | 2 T. finely chopped sweet pickle |
| 2 c. chopped cooked chicken | 2 T. chopped parsley             |
| 1½ tsp. salt                | 2 T. chopped pimiento            |
| ½ tsp. pepper               |                                  |
| 1 T. lemon juice            |                                  |

Dissolve chicken bouillon cube in the boiling water. Remove ¼ cup bouillon and let cool. Sprinkle cooled bouillon with unflavored gelatin. When gelatin has softened, add to remaining bouillon and stir until dissolved. Cool until mixture begins to thicken. Add remaining ingredients. Pour into an oiled 1½-qt. mixing bowl. Let set, then unmold.

Prepare a lemon glaze by dissolving one 3-oz. lemon jelly powder in 1 cup hot water. Let cool, then pour into the mixing bowl used as a mold. Return chicken mold to bowl, pushing down gently to force lemon jelly up sides

of mold. Chill. To serve, unmold on serving dish. Garnish as desired with crisp greens, cream cheese rosettes, green pepper rings, etc.

### Molded Shrimp Salad

- |                              |                      |
|------------------------------|----------------------|
| 2 c. mixed vegetable juice   | 3 T. cold water      |
| 1 T. brown sugar             | 1½ c. hot water      |
| 3 T. lemon juice             | 1½ c. cottage cheese |
| 1 T. unflavored gelatin      | 1½ tsp. minced onion |
| 5-oz. can shrimp, drained    | 1½ tsp. lemon juice  |
| 3-oz. pkg. lime jelly powder | 2 T. horseradish     |
|                              | 1 T. mayonnaise      |

Heat the vegetable juice, brown sugar and lemon juice together. Soften gelatin in the cold water; then dissolve in the hot juice. Chill until partially set. Dip shrimp in partially set jelly, then press on sides of a 2-qt. mold. Chill until firm, then pour in remaining gelatin mixture. Chill until firm.

Dissolve lime jelly powder in the hot water. Chill until partially set. Beat until

light, then stir in remaining ingredients. Pour over the shrimp layer in the mold. Chill until firm.

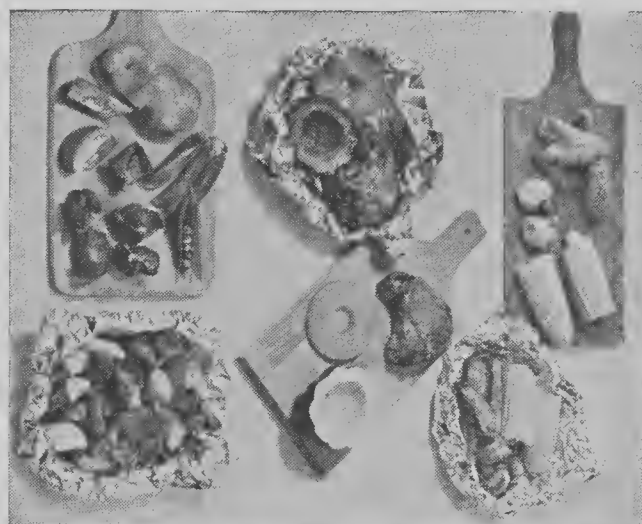
### Summer Fruit Mold

- |                                             |                                                                                                 |
|---------------------------------------------|-------------------------------------------------------------------------------------------------|
| 2 pkg. unflavored gelatin                   | 4 c. mixed fresh fruit (peach slices, halved white grapes, watermelon pieces, cantaloupe balls) |
| 2¾ c. cold water                            |                                                                                                 |
| ¾ c. sugar                                  |                                                                                                 |
| ½ tsp. salt                                 |                                                                                                 |
| ½ c. lime, lemon, orange or pineapple juice |                                                                                                 |

Sprinkle gelatin on 1 cup of the cold water to soften. Place over boiling water and stir until gelatin is thoroughly dissolved. Add sugar and salt. Stir until sugar is dissolved. Add to remaining water. Stir in fruit juice. Arrange small amount of the fruit in bottom of oiled mold to form a design. Spoon on just enough of the gelatin mixture to cover bottom of mold. Chill until almost firm. Chill remaining gelatin mixture until the consistency of unbeaten egg white; fold in remaining fruit. Spoon on top of almost firm layer. Chill until firm. Unmold on serving dish. If desired, garnish with frosted grapes made by dipping grapes in egg white, then in fruit sugar and allowed to dry.

Note: Other fruit combinations might be used, such as orange and grapefruit sections with blueberries and strawberries; or raspberries, peaches and bananas. Orange juice or canned pineapple juice may be substituted for the citrus juice and water. V

## Pre-Packaged Meals



[Reynolds Aluminum photo]

You can find a place for some of this year's vegetable harvest in the packaged dinners you'll prepare for freezing.

PERHAPS you'd like to try your hand at pre-packaged meals. Individual dinners of meat and vegetables, home-packaged in aluminum foil, may be prepared a day or more ahead.

Tender meat cut in serving size or small portions, and potatoes or some other starchy vegetable may be combined to suit family tastes. Brown the meat lightly, cut vegetables in sizes that will cook in the time required for the meat and place them all in the center of a large square of foil. Season as desired and seal the foil to form a tight package. These will store well for 2 days in the refrigerator. They will keep longer in the freezer, but for frozen storage blanch vegetables for recommended times before packing.

When you wish to cook the packaged meals, just transfer them to a moderately hot oven preheated to 375°F. and bake for 1 hr. if chilled, about 1½ hr. if frozen. Use the same times for outdoors cooking over a medium hot fire.

### Home Packaged Chicken Dinner

- |                                    |                            |
|------------------------------------|----------------------------|
| Chicken, cut in frying-size pieces | Mushrooms, fresh or canned |
| Butter                             | Corn on the cob            |
| Onion and celery, finely chopped   | Seasonings                 |
|                                    | Chopped parsley            |
|                                    | Heavy duty foil            |

Brown chicken lightly in butter. Brown mushrooms and 1 tablespoon each of celery and onion for each dinner and place with chicken servings on foil squares. Add several whole mushrooms (or pieces). If dinners are to be refrigerator-stored for early use. Sprinkle meat and corn with salt and pepper and chopped parsley, if desired. Rinse skillet in which chicken was browned with 1 tablespoon of water for each dinner being prepared and add this amount of liquid to each package. Bring two sides of foil up over food and double seal the edges tightly on top of package. Seal foil at the other two ends with a double fold. Store in the refrigerator for up to 2 days, in the freezer for longer. To

serve, bake the unopened packages on a cookie sheet in a moderately hot oven at 375°F.; allowing 1 hr. for chilled dinners, 1½ hr. if frozen. Turn packages once or twice if cooking on an outdoor grill.

### Pork Chop Refrigerator Dinner

- |                           |                 |
|---------------------------|-----------------|
| Pork chops                | Brown sugar     |
| Acorn squash              | Seasonings      |
| Pineapple slices, drained | Heavy duty foil |

Brown pork chops in a skillet. Split small squash, slice larger ones in thick rings, removing seeds. For each dinner, place a pork chop, a pineapple slice, and half a squash or a squash slice. Sprinkle brown sugar over the pineapple and squash. Season with salt and pepper. Rinse the skillet in which the chops were browned with 1 tablespoon of hot water for each dinner being prepared and add this amount to each package. Bring two sides of foil up over food and double seal the edges tightly on top of the package. Seal foil at remaining ends with a double fold. Store in the refrigerator up to 2 days. To serve, bake on a cookie sheet in a moderately hot oven at 375°F. and bake 1 hr. for ½-in. chops, 1¼ to 1½ hr. for thicker chops.

### Beef Dinner

- |                     |                                 |
|---------------------|---------------------------------|
| Chopped onion       | Heavy duty foil                 |
| Butter              | Frozen peas                     |
| Tender beef, cubed  | Potatoes, cut in small quarters |
| Tomatoes, quartered | Seasonings                      |

Saute onion in melted butter. Brown cubes of beef. Peel and slice tomatoes in large wedges. For each dinner, place a serving of beef cubes on a large square of foil with about 1 tablespoon chopped onion, ½ cup peas, ½ cup tomato and ½ cup potato. Season each well. Rinse skillet with hot water and add about 1 tablespoon to each dinner package. Bring two sides of foil up over food and double seal the edges tightly on the top of the package. Seal foil with a double fold at the other two ends. Store in the refrigerator or freezer. To serve, place on a cookie sheet in a moderately hot oven at 375°F. and bake 1 hr. if chilled; 1¼ hr. if frozen. V

A legend  
of Indian days



## The Little Brave

by EDITH C. FULLER

FROM his father's lodge on the banks of the mighty river O-To-To stole on silent feet. It was still early and the camp not yet astir so the little boy was not afraid of being missed. But he was worried.

Vaguely, he remembered waking in the night to hear a rider come to his father's lodge and his father saying "We move, then, if danger comes." Then he fell asleep again.

Now in the bright morning light he was alarmed as he hurried along. He did not want his father to break camp for all the wild things of the

against his sturdy little body. "Hurry, O-To-To" they seemed to chant.

The tall pine trees bent and swayed as the wind stirred the green branches, and whispered a hurried warning. "Go, little O-To-To, go quickly. Run as the fleet deer of the woodland run when danger comes on swift foot. Run back to your father's lodge by the quick-flowing stream and you will be safe. The Fire God is angry, he will spare none."

As he watched, angry streaks like thin pencils of red light stabbed at

ball in the twilight sky. Through the smoke, moving on slow legs, came Quills the porcupine.

"Hurry, O slow one" cried O-To-To, clapping his small hands quickly together. Then, shading his eyes against the sting of the thickening smoke, O-To-To turned to Tamasi the bear, and in his small boy's voice the command rang clear and firm as though it was his own father's voice speaking to the braves in his lodge. "Quickly, Tamasi, you must lead us to the Great Cave where we have so often played.

"We will go far underground and then we will come out into new feeding grounds. The mighty river shall shield us from the Fire God."

O-To-To clapped his hands again and the animals stood up to follow Tamasi. Now, the bear was very old and the heavy smoke made him wheeze, but proudly, as the chosen leader, he put his strong nose to sweeping aside the dense undergrowth until he found the path.

THROUGH the thick gray pall came many animals running, seeking sanctuary from the raging Fire Spirit, and seeing O-To-To, they sensed protection.

More swiftly now the long line began to follow Tamasi from the edge of the clearing along the path through the underbrush, until at last the mouth of the Great Cave stood open before them.

The big bear, on sure and steady feet, began a slow descent into the cavern's gloomy tunnel. But the animals behind him drooped and sank with weariness in the choking air, and panted for water.

O-To-To looked at the young fawns staggering on weakened legs, the baby rabbits trembling against their mother's side, and his heart was heavy with sadness. But he could not leave them at the cave's mouth to perish from the fire's hot breath. He must drive them to follow Tamasi, for the bear knew where water trickled from a spring deep in the heart of the cavern.

Fiercely, as became a chieftain's son, O-To-To rubbed his small hands across his eyes to still the hot tears. Fiercely he clapped his hands until, obedient to his will, the tired animals rose and stumbled down the long incline to the spring.

Then, at dusk, the animals came from the deep cavern into a new feeding ground.

And a tired little boy, faint with hunger and weariness, yet still proudly erect, scanned the darkening horizon and saw the smoke of his father's camp.

Tonight he would sleep. Tomorrow he would tell his parents how he had escaped the fiery death, and his mother would gather him close and murmur softly and thankfully "My Little Brave."

## Rural Rhymes

### The Water-Trough

*I wait beside the busy thoroughfare,  
Inviting, cool, and eager to provide;  
Alas for horses! few remain, O where  
The many quivering mouths that I  
supplied!*

*There was a time when every hour  
brought  
Some thirsty horses to my welcome  
site;  
The knowing beasts unguided, reins  
untaut,  
Approached with knowledge of a  
horse's right.*

*But there was one denied the comfort  
sought,  
His driver heedless of the half-turned  
head  
Which looked in my direction, pant-  
ing, hot,  
Poor Tom would know relief when he  
was dead.*

*Thrice-welcome now my users, for  
more rare,  
Their gentle noses stir my storied  
draft:  
Old Dan and Doll, the Colonel's gal-  
lant mare,  
And yes! once mighty Jumbo came  
and quaffed.*

—DESMOND LONERGAN.

### Morning Glories

*The Morning-glory Climbing Club  
Is out full force today,  
Dressed in their bright blue uniforms,  
The members look quite gay.*

*With strong green ropes they find a  
path  
Cross fence and over wall,  
And never stop to rest a bit  
'Til night begins to fall.*

*Tomorrow morning once again  
These climbers, full of fun,  
Will reach their graceful fingers up  
As if to touch the sun!*

—FRANCES GORMAN RISSE.

### Beauty

*Beauty is everywhere—  
Within an hour  
I saw a honeybee  
Drowse in a flower;  
I saw a great black band of  
cloud*

*Sweep from the west  
With golden lightnings  
Playing on its breast;  
I saw the rain  
With myriad, mystic feet  
Come dancing through the fields  
Of blooming wheat;  
I watched the rainbow  
Swinging through the sky,  
And saw its magic wonder  
Fade and die  
Into a miracle,  
A strangely wondrous thing:  
A bursting rose,  
A bird upon the wing;  
I saw all gladness  
And all glory pass—  
A little, naked child  
Upon the grass!*

—EDGAR DANIEL KRAMER.



Illustrated by ANNORA BROWN

wood had become his friends and it would be a sad parting if he had to leave them.

O-To-To loved the little squirrels and the deer that frolicked along the paths.

He loved the quick-hopping rabbits and the slow-moving porcupine. They were his friends and he played with all of them. Most of all he loved Tamasi, the big black bear, who let him ride on his back as he moved ponderously about.

O-To-To talked to them all. He answered when the wind murmured through the trees and he spoke to each little flower nodding at him from the grass. He watched the leaves flutter and fall in the pale autumn sun and grieved for the trees left desolate and bare.

Now as he moved swiftly through the wood to reach the clearing where his friends played and romped, O-To-To felt uneasiness creep through him. Why was everywhere so strangely silent?

Then, lifting his nose, little O-To-To became aware of a pungent smell. He stood still, sensing a hidden danger in this scent which stung his nostrils.

The high wild grasses rustled in the strengthening wind and beat

the smoky horizon and the smell of burning was stronger in his nostrils.

Then O-To-To remembered the messenger who had ridden through the night to warn the chief. "My people," thought O-To-To, "have horses. They will be quick to run before the angry Fire God and so my people shall find safety. But where is there safety for the spotted fawns, for the rabbit with her young and for the porcupine who cannot move in haste? They are my friends. Shall I leave them so that I might be safe?"

Quickly, O-To-To took from his little buckskin jacket a short slender reed. Putting it to his mouth, he shrilled a high keening note. Again and again the little reed sounded.

THROUGH the trees ran two small fawns on trembling legs, and sank down before him. A rabbit with her three young brushed through the grass with nervous haste and, gathering her babies close, flopped down at O-To-To's feet. Through the trees came Tamasi the black bear, speed swaying his big body from side to side.

Still O-To-To did not move but blew again his urgent message. Now the smoke was like a thin curtain before him and the sun a reddened

# Ten Ways to Calm a Temper Tantrum

by VALERIE KRAFT

1. *Keep calm yourself . . .* you need all your strength to direct your child's dynamic energies into useful, happy paths.
2. *Distract his attention . . .* send him to meet the mailman, ask him to bring in the milk, bring up some subject entirely unrelated to his temper.
3. *Laugh, clown, laugh . . .* nothing sobers a furious child faster than the realization that he is not being taken seriously.
4. *Read him a story . . .* a psalm is a good choice for both of you at this moment. Or a lovely old poem.
5. *Lower your voice . . .* see if you can manage a whisper. He'll have to calm down to hear what you're saying.
6. *Put him in a tepid bath . . .* being sure to hold your hands gentle and keeping the water level below his nose.
7. *Give him his lunch . . .* you know how irritated an adult gets before meals. Maybe he's hungry, even if it isn't meal time. But don't make it sweets, because he may grow up to stuff himself every time he's out of good humor. Use this one discreetly.
8. *Retire to your own room and close the door . . .* unless he is subjecting himself to immediate physical damage, this always works. His tantrum is aimed at dominating you. If you refuse to witness it, he is smart enough to know he's wasting his strength.
9. *Put him in his room and close the door . . .* and put stoppers in your ears to prevent yourself from peeking in. This child is geared to self-preservation and unless very tiny, can be counted on to stop short at the proper moment.
10. *Spare the rod and spoil the child,* says the Good Book itself. We don't recommend a cat-o-nine tails, but would likely approve a healthy passing swipe where it does the most good. ✓



## Social Conversation

by ELEANOR REESOR

WHEN we speak with people we don't know very well, it helps to think of conversation as a kind of game. Like any other game, social conversation requires two or more players, a little equipment, a few ideas to bounce around and some mutually accepted rules of play. The equipment is minimal and inexpensive . . . just two or more human beings with voices, the honest desire to communicate and one player with courage to open his mouth and say something.

Nobody is born knowing how to talk. All human speech is learned; therefore it follows that we may learn to speak skilfully, adequately or poorly. But it is never too late to learn new and improved patterns of speech if we aren't completely happy with the way we now express our thoughts and feelings.

Like any other skill, we learn to talk by imitation and identification with the people with whom we live, and those we love and admire. We also learn by both formal and informal instruction . . . such as English composition, grammar and literature; through debates, conferences, public speaking contests, reading and ordinary conversations. But we learn most by trial and error . . . by practical experience. We seem to learn best by doing things for ourselves. Nobody ever develops muscles sitting in a rocking chair.

In the same vein, nobody ever becomes an interesting talker unless he takes the opportunities that come his way to talk to all kinds of people under different circumstances. We have to possess or develop the courage to open our mouths and say something . . . and we also have to try "over and over again" like Robert Bruce and his persistent little spider. Have you heard the new version of that story? "If at first, you *don't* succeed, that makes you just about average."

The cardinal rule of this game is that after the first serve has been made, the other player or players must attempt to return the conversational ball. With a little practice, you will usually discover once you get past the two opening volleys that a lively game is well underway.

A GOOD conversation should flow back and forth among the players, be they two or twenty in number. However, inexperienced or poor players often get bogged down on the opening play. The secret of successful play is *not* to serve your opponent a question to which he can answer a simple "yes" or "no." Instead, phrase your question so that he has to give "a personal opinion" answer.

Formerly you might have said, "I'm sure sick of winter, aren't you?" Likely your friend would merely have answered, "Yes, I am." Now try this gimmick: "Winter isn't my favorite season, what's yours?" Then the other person has to think before he reveals his "personal opinion" answer and then explain why he likes his selected season best—whether it's for the gardening, swimming or fishing.

Just a word of caution. I said to ask for "personal opinion" answers . . . not personal questions like "How old are you?" or "How much money does your father pay you for helping him on the farm?" "How much do you weigh?" or "Do you go steady?" Personal questions are in poor taste for any young person (or older person) to ask. If strangers want to tell their personal affairs, they will in their own good time. In the meantime, don't be rude or hurt anyone's feelings unintentionally by asking personal questions in a socially awkward attempt to keep the talk going.

Most of us genuinely want to be friendly, to mingle easily with others, and to widen our mental horizons and to quicken our sense of being alive. Yet all too frequently we miss out on many wonderful opportunities merely because we hang back secretly afraid of being snubbed. How does any young adult overcome this childish and miserable fear of real or imagined rejection?

I've found I can talk to any person if I begin my conversation with a remark that penetrates to the core of the stranger's interests. Usually it is something about his work or his family. Remarks about the weather or fussy, little questions only irk or bore an intelligent person. Be genuinely interested in the other person—in what he is saying, doing or thinking. Make an intelligent comment to prove your interest and then wait for him to respond. And he will respond, for the simple reason that all normal human beings enjoy meeting people who show genuine interest.

WHAT can we talk about besides the weather? Why can't we think of something interesting to say when we meet one another? The whole, wide wonderful world surrounds each one of us twenty-four hours a day. We have only to use our eyes, ears and senses of touch, taste and smell to have something of interest to report.

What of the beauties of nature? The wise ways of the birds and the animals? What of a book we read lately . . . or a movie or TV play we enjoyed? What of interesting items in newspapers, farm magazines, on radio or television? What

about the stirring sermon we heard recently at church? What do we as individuals think and feel and enjoy in the world around us?

Sometimes a wonderful, old person who has almost completed life's journey can deepen our understanding of the inner nature of things. Wise and witty Bertrand Russell after 89 years of very happy and very productive living tells us, "It is only necessary to open your hearts and minds to let the imprisoned demons escape and the beauty of the world take possession." ✓

## Safe Water

SAFE drinking water is important to summer outings. Tap water from a public water supply is usually safe. The sparkling clear water from springs, wells, lakes, or rivers, is another matter. Yet you can make sure it is safe by purifying it yourself.

Here are four rules to help you:

1. Strain water through a clean cloth to remove any sediment or floating materials.

2. Boil vigorously for one full minute to kill germs.

3. If you can't boil the water, disinfect it with any of these chemicals:

Iodine or chlorine tablets: These are available from drug or department stores. Follow directions on the package.

Tincture of iodine (from your medicine chest or first aid kit): Add three drops to each four cups of water. Mix well. Let stand for 30 minutes.

Chlorine bleach (from the home laundry): Read the label for the percentage of chlorine and then follow this table:

	Drops per 4 cups of water
Chlorine	
1%	10
4 - 6%	2
7 - 10%	1

Mix well. Let stand for 30 minutes. For muddy or turbid water double the quantities shown.

4. Keep sterilized or purified water in clean containers. And do use it for drinking, cooking, making prepared drinks or brushing your teeth. ✓

## Summer Thunderstorm

Green trees sway their rugged limbs,  
As from the west a storm cloud rolls.  
Meadow larks have hushed their hymns,  
And cantering to their mothers, foals  
Wait in fearful expectation.

The sun is quickly put to flight  
Forward comes this thing of might,  
Land is lit with eerie light;  
There is a hush like dead of night,  
In rolls the wheel of thunder.

Gusts of wind sweep down the plain,  
To bend the trees like mighty bows.  
In gushing torrent falls the rain;  
Large hailstones add their icy blows  
As from the sky they plummet.

And then, as quickly as it came,  
The thunderhead is gone from sight;  
Earth, refreshed, is all aflame  
With blazing bright resplendent light.  
And birds resume their trilling.

—ALF HUEBERT



## What Farm Organizations Are Doing

### MFU DISTRICT CONVENTIONS TAKE ACTION

Manitoba Farmers Union district conventions have dealt with, amongst other items of business, alleged false statements by newscasters on election night, results of the devalued dollar, and the need for a dam on the Whitemouth River in the province.

At District 4 Convention, held at Neepawa, MFU delegates voiced a strong protest against misleading and untrue statements made by newscasters on the national broadcast held on election night which implied that farm people in Western Canada had been receiving "cheque after cheque" from the Federal Treasury during the past year.

Delegates felt that statements of this kind were unfair to farm people regardless of which party they supported. The only payment received from the Federal Treasury this year had been the \$1.00 per acre, \$200 limit, acreage payment to individual grain growers. The meeting pointed out that PFAA, Wheat Board and crop insurance payments are made to the farmer from pools created by the farmers' own money. They declared that newscasters and newspapers should be careful to give a true picture in such matters, because the false statements made created a wrong impression in the minds of urban people.

At District 10 Convention, held at Beausejour, MFU delegates decided to send a telegram to Prime Minister Diefenbaker requesting immediate action on promises made by him and Justice Minister Fulton to take drastic steps to curb undue price increases by corporations and other businesses attributed to the devaluation of the dollar. The same meeting resolved to request the Manitoba Government to study the possibility of constructing a dam on the Whitemouth River where flooding had wiped out seeded crops this spring.

### N.S. FEDERATION ANNOUNCES MILK PROMOTION CAMPAIGN

The Nova Scotia Federation of Agriculture reports that the Truro Milk Producers Association is sponsoring a milk promotion and "String

Along" contest during July. Specially marked bottle caps will be used on homogenized milk. Boys and girls will be encouraged to save these caps on lengths of twine. These "String Along" caps will be taken to a free movie at the end of the contest where substantial prizes will be awarded to boys and girls with the longest "String Along" of bottle caps.

During the period of the contest, a radio portion of the promotion will feature three morning quiz shows a week, with a talk on the value of milk by a nutritionist, as well as advertising for the "String Along" contest. Boys and girls will be asked to submit five bottle caps with their name and phone number. The names selected will be given the opportunity to win theatre passes, and a supply of special bottle caps for the "String Along." "String Along" prizes will be bicycles and transistor radios.

### HUTCHINSON ELECTED FUA JUNIOR PRESIDENT

Jerald Hutchinson of Warner, Alta., was elected Junior President of the Farmers' Union of Alberta at the organization's annual meeting held on June 18 in connection with Farm Young People's Week held at the University of Alberta. Eugene Elm of Hardisty was elected First Vice-President of the Junior organization.

The Junior FUA Queen Contest was won by Pheona Kuehn of Warner, and her ladies in waiting were Patty Bonnett of Ponoka and Sylvia Krebs of Bruderheim. The Queen was crowned at the closing banquet and dance by Dr. Walter Johns, president of the University of Alberta.

### SFU PRESIDENT OBJECTS TO EMERGENCY MEASURES

A. P. Gleave, president of the Saskatchewan Farmers Union, stated that western farmers would look with disfavor on any increase in Canadian tariffs which would adversely affect exports of Canadian farm products. For the same reason, Mr. Gleave said they would object to a "tight-money" policy for farmers which may hamper expansion of production in cattle and wheat at a time when export opportunities are favorable.

"One of the most important things for the Government to watch," Mr. Gleave added, "is the prices of goods manufactured in Canada. Canadian manufacturers must not be permitted to increase their prices simply because imported goods become dearer."

The SFU president thought great damage to the value of the Canadian dollar was done by speculators who move their funds from one country to another in order to profit from currency fluctuations, thus increasing pressure on the exchange rate. He wondered whether the time was not right to impose currency controls.

## The Strange Case of the African Violet

**A**N African violet plant appeared to be healthy, but the flowers withered and died shortly after opening. Dr. W. P. Skoropad of the University of Alberta diagnosed an unusual type of powdery mildew. Usually, he says, the leaves show symptoms of powdery mildew, which occurs on a variety of plants, particularly peas, ornamentals, and even grass.

Normally, with powdery mildew, the treatment is to dust with flowers of sulphur, or to treat with Karathene

or Mildex. But in this African violet case, where the flowers were affected, Dr. Skoropad had to isolate the plant, break off and destroy the dying and the apparently healthy blooms, and then treat with one of the chemicals mentioned. A careful check for signs of the disease must be made when new blooms appear.

Avoid shaking the infected plants while moving them. The fungus that causes the disease produces an abundance of spores, each of which can start a new infection.

## "Who Said The Catholic Church Never Changes?"

Bill remembered when Pope Pius XII changed the law to permit the drinking of water before Holy Communion.

"How about that?" he asked his Catholic friend, Joe. "And look at the changes the Church makes in the requirements of fast and abstinence and the rules for Lent. And the Pope has changed the hours for Mass, to mention just one other change! What do you mean, the Catholic Church is the same everywhere and never changes its laws?"

An informed Catholic, of course, could have told Bill that certain laws of the Catholic Church have been undergoing changes all the way back to apostolic times. The Canon Law of the Church, for example, consists of more than 2,400 canons which have evolved through many changes into the form in which they are promulgated today.

But there are two kinds of laws upon which the doctrine of the Church is founded, and which are never changed. One is the natural law; the other the positive divine law. They are in one sense the basic laws of the Church. But in their primary and larger way they are the laws of God, which the Church obviously has no authority to change. The Church can and does promulgate them, but she never amends or alters them.

The natural moral laws, of course, are those which God has made evident to the reason and intelligence of man... man shall adore God, shall honor his parents, shall not kill, or lie, or steal. When man's conscience failed its obligation to observe these laws, God put them into words through the Commandments and through the ministry of His Son, Jesus.

To proclaim these laws again and again, and to urge man's compliance with them, is a proper function of the

Church. But she cannot amend or alter them in any way.

This is also true of the divine laws enunciated by Our Lord, which the Church is commissioned to proclaim—but not to change. In authorizing the Church to dispense the Sacraments, Jesus did not specify the exact occasions or conditions of fulfillment. Thus, when the Church prescribes such occasions or conditions and later changes them, she is not changing the divine law itself.

Spread over the face of the earth... with her people living under a variety of political, social and economic conditions... the Church must adapt her regulations to varying needs. But in the basic laws of the Church... in the essentials of God's truths... she remains changeless and unchanging down the centuries of time.

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## Letters

### Wildlife Abound

I would like to say how much we enjoy your magazine and, in particular, the weather report. The cost of your magazine is so little for so much. We are retired folk who derive much from your rural news, hints, tips and wildlife stories. Our place abounds in wildlife and we get so much more satisfaction in studying them through the guidance of your articles.

Only yesterday we had a flock of evening grosbeaks. After they had rested and eaten from our bird feeder, they took off again. In the evening they were replaced by bob-o-links, and now too they have continued their journey. They were so colorful, especially when added to the variety of blue jays, woodpeckers, robins, etc. But at least they did stop here and we saw them. I wish the giant porcupine we have would take off. When we first saw him we were sure it was a bear cub.

MRS. A. A. TURNBULL,  
R.R. 2, Hardings, Kings Co., N.B.

### Asleep at the Switch

I enjoy seeing the photos of the small fry. I am following the example of Mrs. Hart who sent in a very charming picture of her twins. I'll go a step further than that. My young son Bernard, who was 4 years old at the time, built himself a submarine — make-believe of course. It was so comfortable he fell fast asleep in it.



I would like to mention that The Country Guide is truly the greatest farm magazine for all us farmers.

MRS. M. BECKIE,  
Bladworth, Sask.

### More Views on the Flag

As a British subject I would like to say "hats off" to Alf Chesterman of Bentley, Alta., for his letter in the May issue.

If any of the parties who proposed a change of flag or national anthem had suffered the hardships and torture of most of the members of the armed forces in World Wars I and II, I am sure they would be ashamed to support any motion in Parliament for a change of either.

In the great space race of today, I hope there can be found a planet where people, who do not enjoy the privileges and freedom we as British

subjects have in Canada, can go and have their own flag and anthem.

I hope we do not have to call on our veterans to defend this flag for a third time from being destroyed by our own people.

H. G. DAVIS,  
Kinmount, Ont.

I have been a silent reader of your worthy magazine. I think that democracy depends on the respect of everybody's opinion. Should I venture mine?

In response to the "Flag Question," raised in your May issue, I would like to note that it was also under the Union Jack that there has been the inhuman dispersion of the Acadians. Under this flag too, until a few years ago, the law in Nova Scotia and New Brunswick maintained that Acadians of French descent could not be landowners. How many more facts as shameful could be mentioned if space would allow?

Why can we not think as other mature countries do? Switzerland, for example. There, people of three different origins link under one flag — a flag representing nothing from the flags of the countries of origin.

Yours for a united Canada.

OLIVIER LAFRANCE,  
Smooth Rock Falls, Ont.

### Well Done!

My feelings, long sensed, now find expression on this page. I am grateful for the nourishing article by your associate, Richard Cobb, on "How to Tackle Landscaping" in collaboration with W. A. "Bill" Cumming, appearing in the April issue. It is a splendid treatment of a story which needs to be told each spring. In adorning our heritage, there are so many things in woody ornaments which are very attractive, well adapted to our prairies, but little used. Then there is the very important factor of proper placement, as so clearly explained in the article.

W. R. LESLIE,  
Winnipeg, Man.

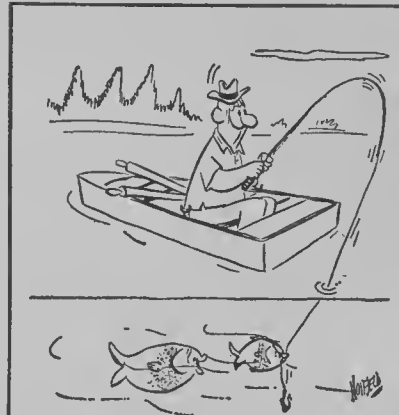
### Starting Young

This little miss, Darlene by name, was staying with her grandmother on a farm at Sheffield Mills, N.S.,



One night while getting supper ready, grandma discovered Darlene had climbed up and taken The Guide which she is not allowed to have. Since the effect was too cute to miss, this snap was taken. We thought your readers would find it interesting.

MRS. BERTHA SMITH,  
Montreal, Que.



"Give a tug and he'll send down an even bigger worm."

### UNITED GRAIN GROWERS LIMITED

#### NOTICE

In accordance with the Income Tax Act, this will advise our customers (including both members and non-members) as referred to in said Act, that in accordance with the terms and conditions, and within the times and limitations contained in the said Act, it is our intention to pay a dividend in proportion to the 1962-63 patronage out of the revenue of the 1962-63 taxation year, or out of such other funds as may be permitted by the said Act; and we hereby hold forth the prospect of the payment of patronage dividend to you accordingly.

The foregoing notice applies to grain delivered to this Company between August 1, 1962 and July 31, 1963.

UNITED GRAIN GROWERS LIMITED  
July 9, 1962, D. G. MILLER,  
Winnipeg, Manitoba. Secretary.

### Notice of Dividend No. 52 UNITED GRAIN GROWERS LIMITED CLASS "A" SHARES

Notice is hereby given that the Board of Directors has declared a dividend at the rate of 5% on the paid-up par value of Class "A" (Preferred) Shares (par value \$20.00 each).

This dividend will be paid on or about September 1, 1962, to shareholders of such shares of record at the close of business on Saturday, July 28, 1962.

By order of the Board.  
D. G. MILLER,  
Secretary.

July 16, 1962,  
Winnipeg, Manitoba.

### Notice of Dividend No. 52 UNITED GRAIN GROWERS LIMITED CLASS "B" SHARES

Notice is hereby given that the Board of Directors has declared a dividend at the rate of \$1.00 per share on the paid-up par value of Class "B" (Membership) Shares (par value \$5.00 each). This is out of earnings appropriated at the rate of 25 cents per annum in the four-year period ending July 31, 1962.

This dividend will be paid on or about September 1, 1962, to holders of such shares of record at the close of business on Saturday, July 28, 1962.

By order of the Board.  
D. G. MILLER,  
Secretary.

July 16, 1962,  
Winnipeg, Manitoba.